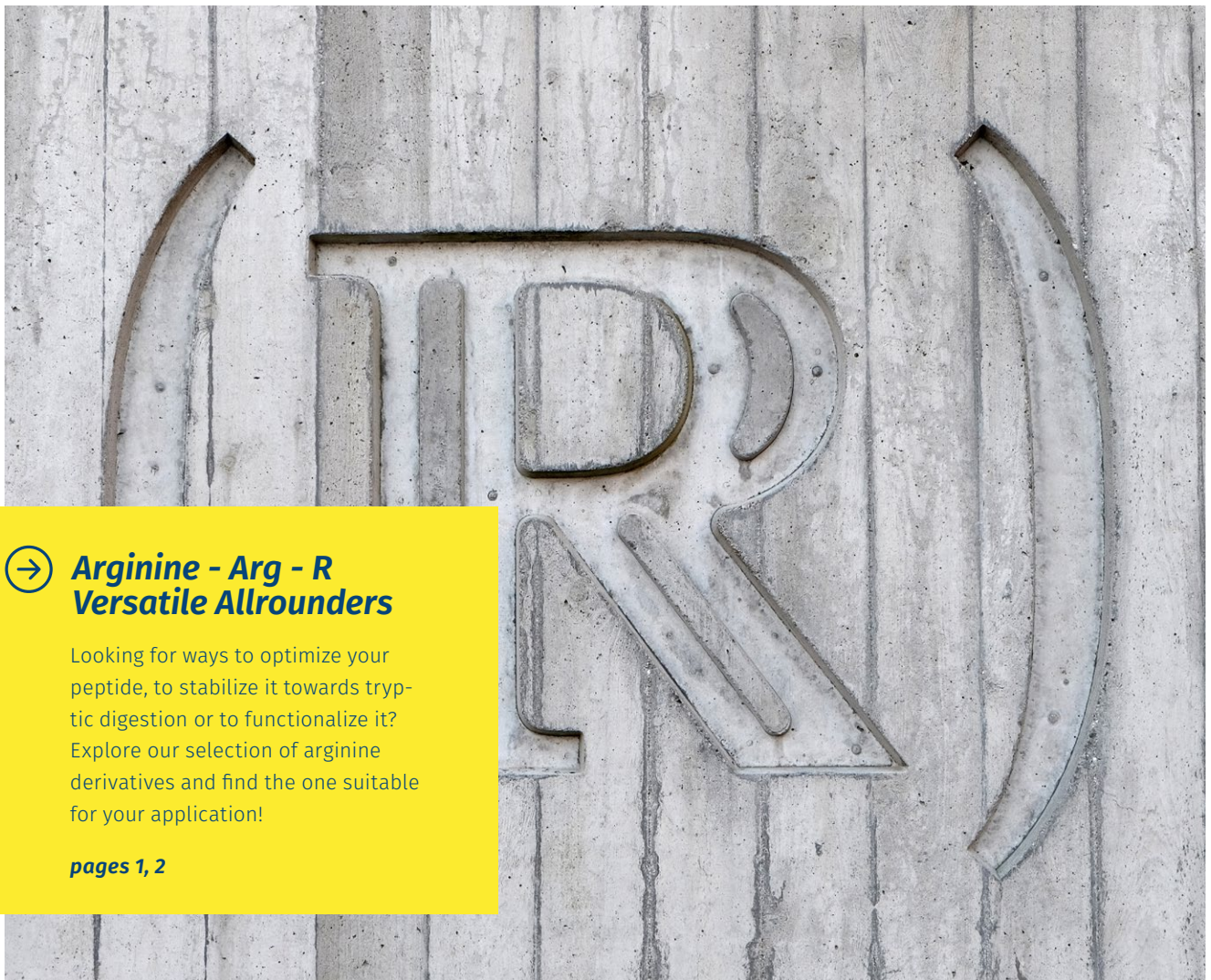


ARGININE

Homologs and Building Blocks



→ **Arginine - Arg - R**
Versatile Allrounders

Looking for ways to optimize your peptide, to stabilize it towards tryptic digestion or to functionalize it? Explore our selection of arginine derivatives and find the one suitable for your application!

pages 1, 2

Short arginines - Increasing proteolytic stability.

page 1

Bioisosteric replacement of the arginine guanidino group by carbamoylation.

page 2

Guanidino prolines as rigid arginine mimics.

page 2



Arginine Homologs

and Building Blocks

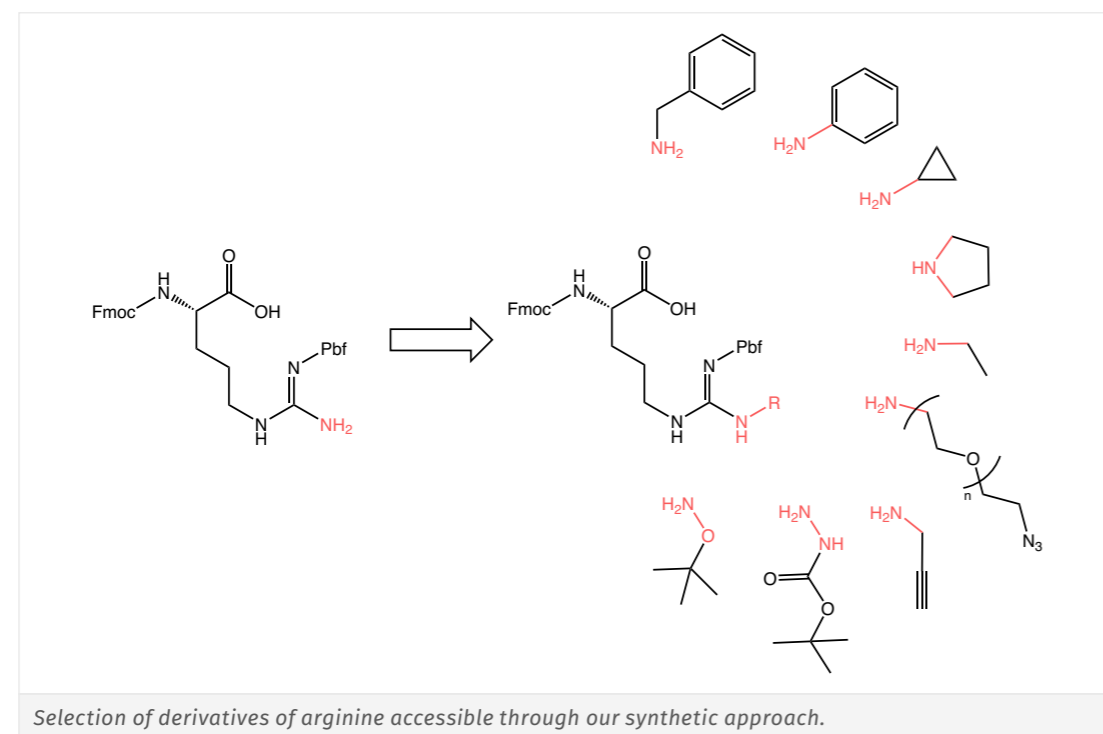
General Information

Arginine is characterized by its amphiphilic side chain, with a C3 alkyl chain terminated by a positively charged guanidino group. Since the latter can undergo hydrogen bonding as well as ionic interactions with binding partners, arginine residues are frequently involved in cellular recognition processes. Consequently, derivatives of arginine are highly sought after, be it for the introduction of arginine-mimetics to improve pharmacokinetic properties of therapeutic peptides, or to introduce an Arg derivative suitable for site-selective modification. One potential application of such arginine derivatives is the conjugation of fluorophores or radionuclide-bearing moieties to the N ω -carbamoyl residue in order to generate labeled probes.

Short Arginines - Increasing Proteolytic Stability

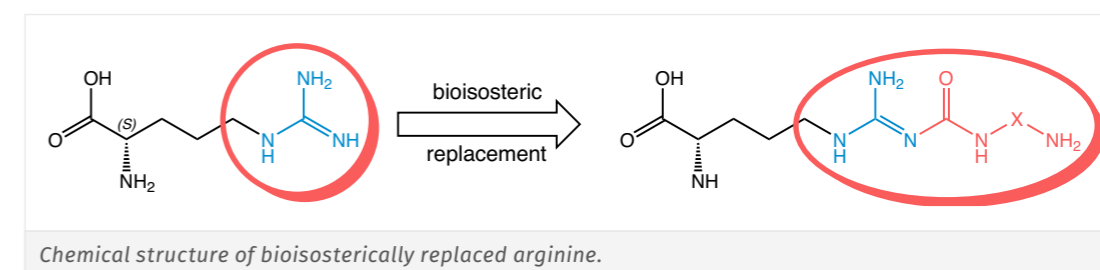
Trypsin, an endopeptidase and natural protease found in the digestive system, cleaves peptide chains and proteins predominantly at the carboxyl side of the amino acids lysine and arginine (except when followed by proline) – one drawback limiting the activity and bioavailability of peptide drugs resulting in unfavorable pharmacokinetics.

Iris Biotech offers shorter arginine homologs, which have been shown to increase a peptide's stability towards tryptic digestion. Similar effects have been observed whenever the guanidino side chain has been modified.



Bioisosteric Replacement

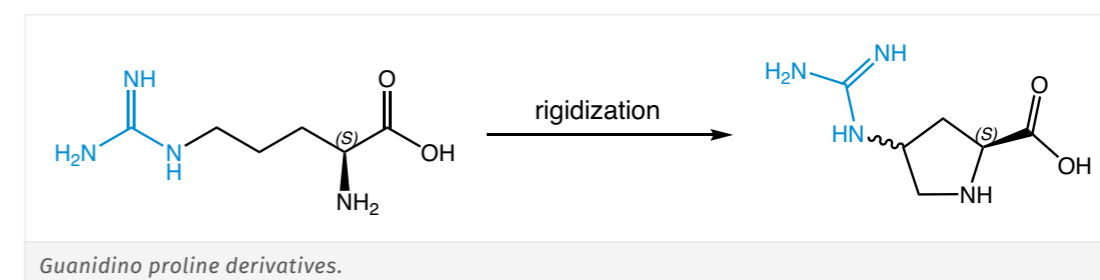
Typically, the most frequently used side-chains for the derivatization of peptides and proteins are those of cysteine and lysine. As numerous biologically active peptides are lacking those amino acids, but contain arginine, an innovative derivatization strategy for arginine-containing peptides was developed. Therefore, the guanidino group is bioisosterically replaced by an amino-functionalized, N ω -carbamoylated arginine resulting in lowered basicity compared to the unsubstituted guanidino group while remaining basic enough ($pK_a \sim 8$) to be protonated at physiological pH. Furthermore, the carbamoyl-guanidino group is a chemically stable structure.



Iris Biotech offers N α -Fmoc protected, N ω -carbamoylated arginine derivatives bearing Boc-protected terminal amino groups ([FAA7210 on page 10](#), [FAA7220 on page 10](#)). Incorporation of those building blocks into peptides has been carried out by SPPS using standard coupling reagents (HBTU/HOBt or PyBOP/HOBt, DIPEA as base, DMF/NMP 80/20 as solvent).

Guanidino Proline Derivatives

In addition, our portfolio includes guanidino proline derivatives as rigid arginine mimics suitable for the investigation of structure/activity relationships.

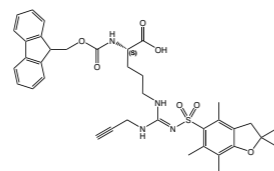


Check out our products listed below to find the arginine derivative suitable for your application!

FAA7400 Fmoc-L-Arg(Propargyl,Pbf)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran)-N''-propargyl-5-sulfonyl-L-arginine

Formula $C_{37}H_{42}N_4O_7S$
Mol. weight 686,82 g/mol

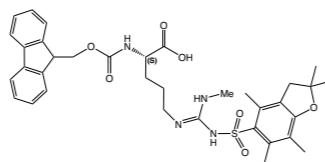


Product details


FAA3360 Fmoc-L-Arg(Me,Pbf)-OH

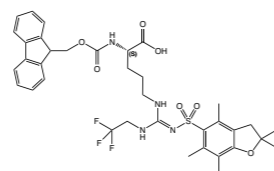
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-methyl-N''-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-sulfonyl)-L-arginine

CAS-No. 1135616-49-7
Formula $C_{35}H_{42}N_4O_7S$
Mol. weight 662,8 g/mol


FAA1012 Fmoc-L-Arg(Tfe,Pbf)-OH

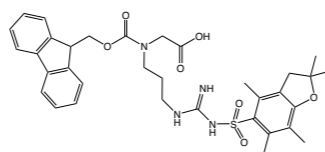
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-trifluoroethyl-N''-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-sulfonyl)-L-arginine

CAS-No. 1060769-47-2
Formula $C_{36}H_{41}F_3N_4O_7S$
Mol. weight 730,80 g/mol


FAA4800 Fmoc-Narg(Pbf)-OH

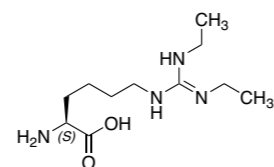
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-[3-(N''-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-sulfonyl)-guanidino)-propyl]-glycine

CAS-No. 1820590-35-9
Formula $C_{34}H_{40}N_4O_7S$
Mol. weight 648,77 g/mol


HAA9620 H-L-hArg(Et)2-OH*HCl*H2O

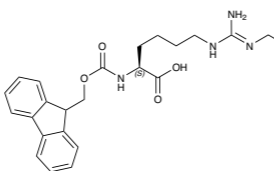
(S,E)-2-amino-6-(2,3-diethylguanidino)hexanoic acid hydrochloride monohydrate

Formula $C_{11}H_{24}N_4O_2 \cdot HCl \cdot H_2O$
Mol. weight 244,34*36,45*18,01 g/mol


FAA9360 Fmoc-L-hArg(Et)-OH*HCl

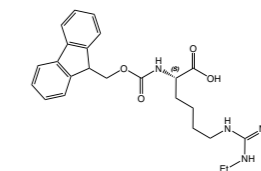
(E)-N2-(((9H-fluoren-9-yl)methoxy)carbonyl)-N6-(N'-ethylcarbamimidoyl)-L-lysine

Formula $C_{24}H_{30}N_4O_4 \cdot HCl$
Mol. weight 438,53*36,45 g/mol


FAA7620 Fmoc-L-hArg(Et)2-OH*HCl

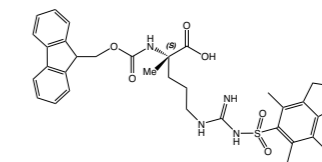
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N,N'-diethyl-L-homoarginine hydrochloride

CAS-No. 1864003-26-8
Formula $C_{26}H_{34}N_4O_4 \cdot HCl$
Mol. weight 466,57*36,45 g/mol


FAA2740 Fmoc-alpha-Me-L-Arg(Pbf)-OH

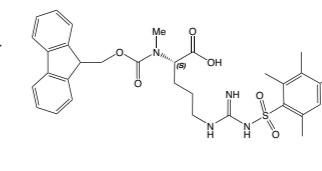
N-alpha-(9-Fluorenylmethyloxycarbonyl)-C-alpha-methyl-N''-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-sulfonyl)-L-arginine

CAS-No. 2124196-74-1
Formula $C_{35}H_{42}N_4O_7S$
Mol. weight 662,8 g/mol


FAA1604 Fmoc-L-MeArg(Mtr)-OH

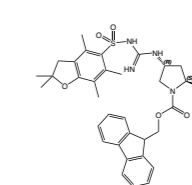
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-alpha-methyl-N''-(4-methoxy-2,3,6-trimethylbenzenesulfonyl)-L-arginine

CAS-No. 214750-72-8
Formula $C_{32}H_{38}N_4O_7S$
Mol. weight 622,74 g/mol


FAA5220 Fmoc-L-Pro(4-guanidino-Pbf)-OH (2S,4R)

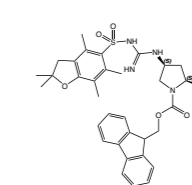
(2S,4R)-1-(9-Fluorenylmethyloxycarbonyl)-4-(3-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-ylsulfonyl)guanidino)pyrrolidine-2-carboxylic acid

CAS-No. 1864002-98-1
Formula $C_{34}H_{38}N_4O_7S$
Mol. weight 646,75 g/mol


FAA5230 Fmoc-L-Pro(4-guanidino-Pbf)-OH (2S,4S)

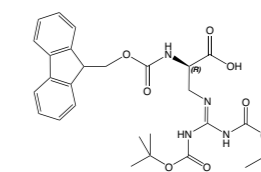
(2S,4S)-1-(9-Fluorenylmethyloxycarbonyl)-4-(3-(2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-ylsulfonyl)guanidino)pyrrolidine-2-carboxylic acid

CAS-No. 2098497-04-0
Formula $C_{34}H_{38}N_4O_7S$
Mol. weight 646,75 g/mol


FAA6190 Fmoc-D-Agp(Boc)2-OH

(R)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-N,N'-bis-t-butyloxycarbonyl-2-amino-3-guanidino-propionic acid

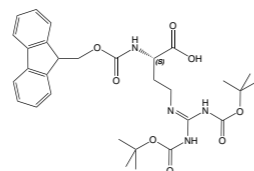
CAS-No. 1263045-67-5
Formula $C_{29}H_{36}N_4O_8$
Mol. weight 568,63 g/mol



FAA6160 Fmoc-L-Agb(Boc)2-OH

(S)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-N,N'-bis-t-butylloxycarbonyl-2-amino-4-guanidino-butyrinic acid

CAS-No. 206183-06-4
Formula $C_{30}H_{38}N_4O_8$
Mol. weight 582,66 g/mol

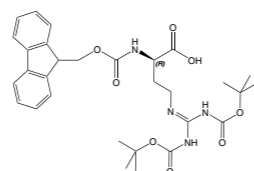


Product details

**FAA6150 Fmoc-D-Agb(Boc)2-OH**

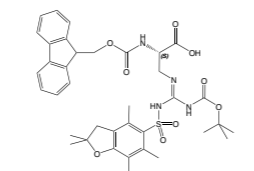
(R)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-N,N'-bis-t-butylloxycarbonyl-2-amino-4-guanidino-butyrinic acid

CAS-No. 1263047-29-5
Formula $C_{30}H_{38}N_4O_8$
Mol. weight 582,66 g/mol

**FAA1773 Fmoc-L-Agp(Pbf,Boc)-OH**

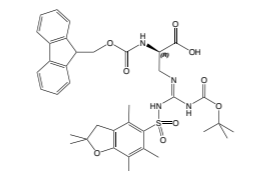
(S)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-t-butylloxycarbonyl-N'-(2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl)-2-amino-3-guanidino-propionic acid

Formula $C_{37}H_{44}N_4O_9S$
Mol. weight 720,83 g/mol

**FAA6191 Fmoc-D-Agp(Pbf,Boc)-OH**

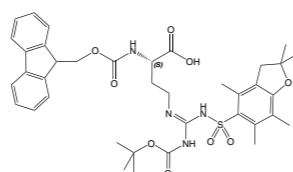
(R)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-t-butylloxycarbonyl-N'-(2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl)-2-amino-3-guanidino-propionic acid

Formula $C_{37}H_{44}N_4O_9S$
Mol. weight 720,83 g/mol

**FAA6161 Fmoc-L-Agb(Pbf,Boc)-OH**

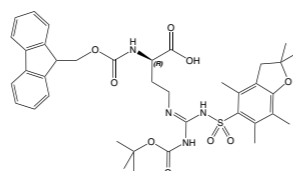
(S)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-t-butylloxycarbonyl-N'-(2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl)-2-amino-4-guanidino-butyrinic acid

CAS-No. 2612397-05-2
Formula $C_{38}H_{46}N_4O_9S$
Mol. weight 734,86 g/mol

**FAA6151 Fmoc-D-Agb(Pbf,Boc)-OH**

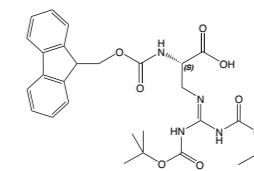
(R)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-t-butylloxycarbonyl-N'-(2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl)-2-amino-4-guanidino-butyrinic acid

CAS-No. 2612397-06-3
Formula $C_{38}H_{46}N_4O_9S$
Mol. weight 734,86 g/mol

**FAA1772 Fmoc-L-Agp(Boc)2-OH**

(S)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-N,N'-bis-t-butylloxycarbonyl-2-amino-3-guanidino-propionic acid

CAS-No. 313232-63-2
Formula $C_{29}H_{36}N_4O_8$
Mol. weight 568,63 g/mol

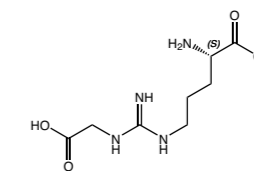


Product details

**HAA9155 CMA**

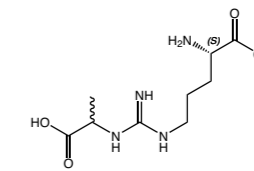
N-omega-Carboxymethyl-L-arginine

CAS-No. 278610-96-1
Formula $C_8H_{16}N_4O_4$
Mol. weight 232,24 g/mol

**HAA9160 CEA**

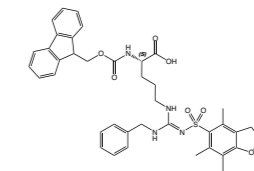
N-omega-Carboxyethyl-L-arginine (mixture of two diastereoisomers)

CAS-No. 861902-72-9
Formula $C_9H_{18}N_4O_4$
Mol. weight 246,27 g/mol

**FAA8275 Fmoc-L-Arg(Bzl)(Pbf)-OH**

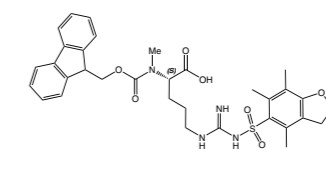
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-(2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl)-L-arginine

CAS-No. 1060769-38-1
Formula $C_{41}H_{46}N_4O_9S$
Mol. weight 738,9 g/mol

**FAA8310 Fmoc-L-MeArg(Pbf)-OH**

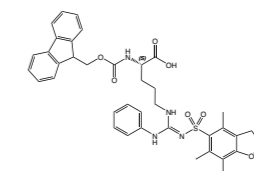
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-alpha-methyl-N'-(2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl)-L-arginine

CAS-No. 913733-27-4
Formula $C_{35}H_{42}N_4O_9S$
Mol. weight 662,80 g/mol

**FAA8415 Fmoc-L-Arg(Ph,Pbf)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-(2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl)-L-arginine

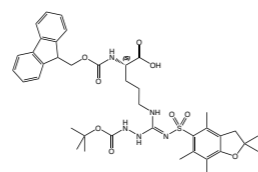
CAS-No. 1060769-49-4
Formula $C_{40}H_{44}N_4O_9S$
Mol. weight 724,87 g/mol



FAA8265 Fmoc-L-Arg(Boc-NH)(Pbf)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-(2,2,4,6,7-pentamethyl-dihydrobenzofuran)-N''-(t-butyloxycarbonylamino)-5-sulfonyl-L-arginine

CAS-No. 1060769-54-1
Formula $C_{39}H_{49}N_5H_9S$
Mol. weight 763,91 g/mol

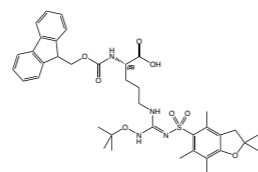


Product details

**FAA8230 Fmoc-L-Arg(tBuO)(Pbf)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-(2,2,4,6,7-pentamethyl-dihydrobenzofuran)-N''-t-butoxy-5-sulfonyl-L-arginine

CAS-No. 1060769-55-2
Formula $C_{38}H_{48}N_4O_8S$
Mol. weight 720,88 g/mol

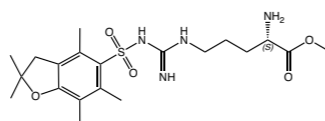


Product details

**HAA9535 H-L-Arg(Pbf)-OMe*HCl**

methyl Nw-((2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-yl)sulfonyl)-L-argininate hydrochloride

CAS-No. 257288-19-0
Formula $C_{20}H_{32}N_4O_5S^*HCl$
Mol. weight 440,56*36,45 g/mol

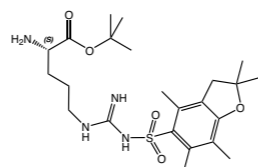


Product details

**HAA3780 H-L-Arg(Pbf)-OtBu*HCl**

N'-2,2,4,6,7-pentamethyl-dihydrobenzofuran-5-sulfonyl-L-arginine t-butyl ester hydrochloride

CAS-No. 1217317-67-3
Formula $C_{23}H_{38}N_4O_5S^*HCl$
Mol. weight 482,64*36,45 g/mol

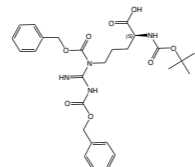


Product details

**BAA6425 Boc-L-Arg(Z)2-OH**

Nd,Nw-bis((benzyloxy)carbonyl)-N2-(tert-butoxycarbonyl)-L-arginine

CAS-No. 51219-19-3
Formula $C_{27}H_{34}N_4O_8$
Mol. weight 542,59 g/mol

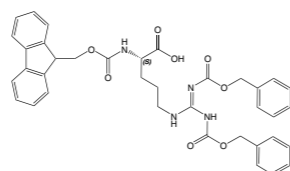


Product details

**FAA6240 Fmoc-L-Arg(Z)2-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N',N''-bis-benzyloxycarbonyl-L-arginine

CAS-No. 207857-35-0
Formula $C_{37}H_{36}N_4O_8$
Mol. weight 664,71 g/mol

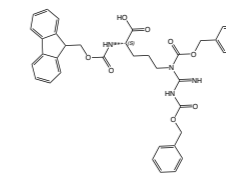


Product details

**FAA9280 Fmoc-L-Arg(Z)2-OH (asymmetric)**

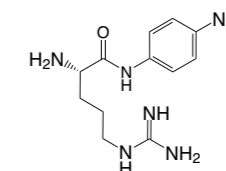
N2-(((9H-fluoren-9-yl)methoxy)carbonyl)-Nd,Nw-bis((benzyloxy)carbonyl)-L-arginine

CAS-No. 1094617-45-4
Formula $C_{37}H_{36}N_4O_8$
Mol. weight 664,72 g/mol

**HAA1177 H-L-Arg-pNA*2HBr**

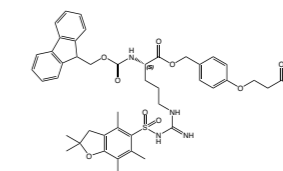
L-Arginine p-Nitroanilide dihydrobromide

CAS-No. 6154-84-3
Formula $C_{12}H_{18}N_6O_3^*2HBr$
Mol. weight 456,2 g/mol

**LW00203 Fmoc-L-Arg(Pbf)-MPPA**

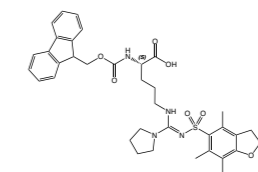
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-(2,2,4,6,7-pentamethyl-dihydrobenzofuran-5-sulfonyl)-L-arginine-3-(4-oxy-methylphenoxy)propionic acid

CAS-No. 1202179-60-9
Formula $C_{44}H_{50}N_4O_{10}S$
Mol. weight 826,96 g/mol

**FAA8270 Fmoc-L-Arg(Pyrrolidine)(Pbf)-OH**

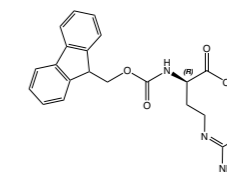
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-(2,2,4,6,7-pentamethyl-dihydrobenzofuran)-N''-(1,4-butyridene)-5-sulfonyl-L-arginine

CAS-No. 1060769-57-4
Formula $C_{38}H_{46}N_4O_5S$
Mol. weight 702,87 g/mol

**FAA7680 Fmoc-D-Agb-OH*HCl**

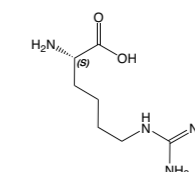
(R)-N-alpha-(9-Fluorenylmethyloxycarbonyl)-2-amino-4-guanidino-butyric acid hydrochloride

CAS-No. 2741370-51-2 net
Formula $C_{20}H_{22}N_4O_2^*HCl$
Mol. weight 382,41*36,45 g/mol

**HAA1225 H-L-HArg-OH*HCl**

(S)-2-Amino-6-guanidino-hexanoic acid hydrochloride

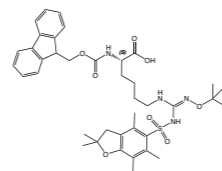
CAS-No. 1483-01-8
Formula $C_7H_{16}N_4O_2^*HCl$
Mol. weight 188,23*36,45 g/mol



FAA8355 Fmoc-L-HomoArg(OtBu,Pbf)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-t-butoxy-N''-(2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl)-L-homoarginine

CAS-No. 1538609-45-8
Formula $C_{39}H_{50}N_4O_6S$
Mol. weight 734,91 g/mol

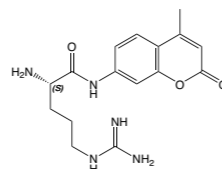


Product details

**HAA7630 H-L-Arg-AMC*2HCl**

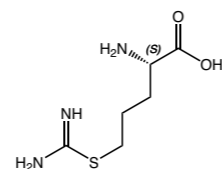
L-Arginine 7-amido-4-methylcoumarin dihydrochloride

CAS-No. 113712-08-6
Formula $C_{16}H_{21}N_3O_3 \cdot 2HCl$
Mol. weight 331,37*72,90 g/mol

**HAA9165 L-Thioarginine**

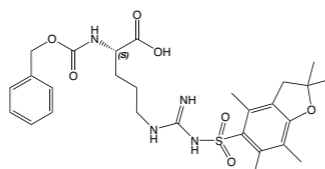
(2S)-2-amino-5-(carbamimidoylsulfanyl)pentanoic acid hydrochloride salt

CAS-No. 190374-70-0
Formula $C_6H_{13}N_3O_2S$
Mol. weight 191,25 g/mol

**ZAA1131 Z-L-Arg(Pbf)-OH*CHA**

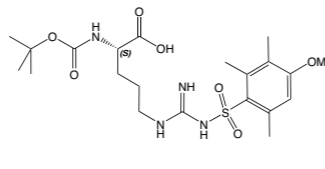
N-alpha-Benzyloxycarbonyl-N'-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-L-arginine cyclohexylamine

CAS-No. 200190-89-2
Formula $C_{27}H_{36}N_4O_7S \cdot C_6H_{13}N$
Mol. weight 560,67*99,18 g/mol

**BAA1391 Boc-L-Arg(Mtr)-OH**

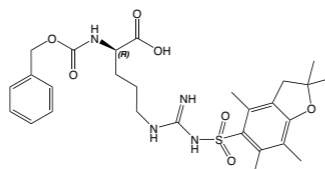
N-alpha-t-Butyloxycarbonyl-N'-[4-methoxy-2,3,6-trimethylphenyl-sulfonyl]-L-arginine

CAS-No. 102185-38-6
Formula $C_{21}H_{34}N_4O_7S$
Mol. weight 486,58 g/mol

**ZAA1173 Z-D-Arg(Pbf)-OH*CHA**

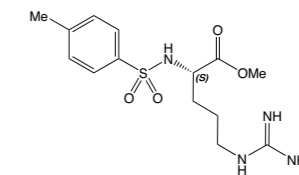
N-alpha-Benzyloxycarbonyl-N'-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-D-arginine cyclohexylamine

CAS-No. 200191-00-0
Formula $C_{27}H_{36}N_4O_7S \cdot C_6H_{13}N$
Mol. weight 560,67*99,18 g/mol

**TAA1507 Tos-L-Arg-OMe*HCl**

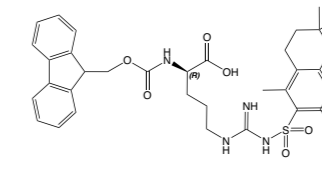
N-alpha-p-Toluolsulfonyl-L-arginine methyl ester hydrochloride

CAS-No. 1784-03-8
Formula $C_{14}H_{22}N_4O_4S \cdot HCl$
Mol. weight 342,41*36,45 g/mol

**FAA1306 Fmoc-D-Arg(Pmc)-OH**

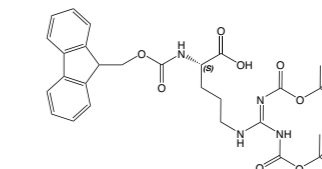
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-[2,2,5,7,8-pentamethylchroman-6-sulfonyl]-D-arginine

CAS-No. 157774-30-6
Formula $C_{35}H_{42}N_4O_6S$
Mol. weight 662,8 g/mol

**FAA1699 Fmoc-L-Arg(Boc)2-OH**

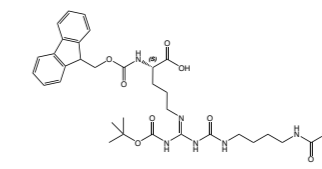
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-N''-bis-t-butyloxycarbonyl-L-arginine

CAS-No. 143824-77-5
Formula $C_{31}H_{40}N_4O_8$
Mol. weight 596,68 g/mol

**FAA7210 Fmoc-L-Arg(Boc,Bu-NHBoc)-OH**

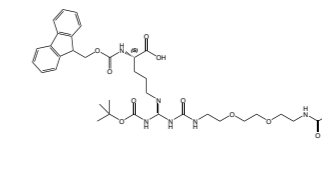
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-t-butyloxycarbonyl-N''-(4-t-butyloxycarbonylamino)butyl)carbamoyl-L-arginine

CAS-No. 1872226-95-3
Formula $C_{36}H_{50}N_6O_9$
Mol. weight 710,82 g/mol

**FAA7220 Fmoc-L-Arg(Boc,PEG(2)-NHBoc)-OH**

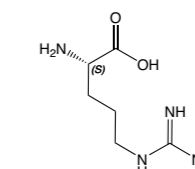
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-t-butyloxycarbonyl-N''-(2-(2-(2-t-butyloxycarbonylamino)ethoxy)ethoxy)ethylcarbamoyl)-L-arginine

CAS-No. 1872226-96-4
Formula $C_{38}H_{54}N_6O_{11}$
Mol. weight 770,87 g/mol

**HAA1069 H-L-Arg-OH*HCl**

L-Arginine hydrochloride

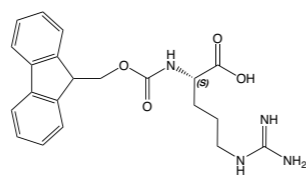
CAS-No. 1119-34-2
Formula $C_6H_{14}N_4O_2 \cdot HCl$
Mol. weight 174,2*36,5 g/mol



FAA1591 Fmoc-L-Arg-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-L-arginine hydrate

CAS-No. 91000-69-0
 Formula $C_{21}H_{24}N_4O_4$
 Mol. weight 396,45 g/mol

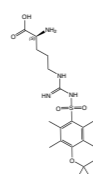


Product details

**HAA9515 H-L-Arg(Pmc)-OH**

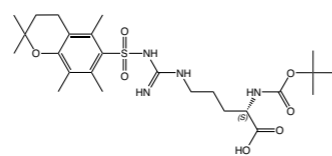
Nw-((2,2,5,7,8-pentamethylchroman-6-yl)sulfonyl)-L-arginine

CAS-No. 112160-37-9
 Formula $C_{20}H_{32}N_4O_5S$
 Mol. weight 440,56 g/mol

**BAA6405 Boc-L-Arg(Pmc)-OH**

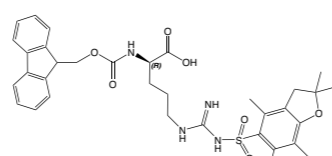
N2-(tert-butoxycarbonyl)-Nw-((2,2,5,7,8-pentamethylchroman-6-yl)sulfonyl)-L-arginine

CAS-No. 200125-12-8
 Formula $C_{25}H_{40}N_4O_7S$
 Mol. weight 540,68 g/mol

**FAA1305 Fmoc-D-Arg(Pbf)-OH**

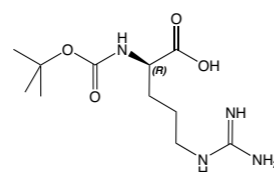
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-D-arginine

CAS-No. 187618-60-6
 Formula $C_{34}H_{40}N_4O_7S$
 Mol. weight 648,8 g/mol

**BAA1023 Boc-D-Arg-OH*H₂O*HCl**

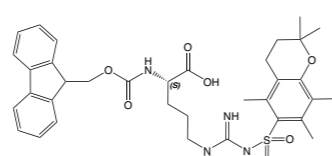
N-alpha-t-Butyloxycarbonyl-D-arginine monohydrate hydrochloride

CAS-No. 113712-06-4
 Formula $C_{11}H_{22}N_4O_4 \cdot HCl \cdot H_2O$
 Mol. weight 274,4*36,5*18,0 g/mol

**FAA1351 Fmoc-L-Arg(Pmc)-OH**

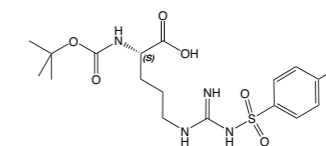
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-((2,2,5,7,8-pentamethylchroman-6-yl)sulfonyl)-L-arginine

CAS-No. 119831-72-0
 Formula $C_{35}H_{42}N_4O_7S$
 Mol. weight 662,81 g/mol

**BAA1068 Boc-L-Arg(Tos)-OH**

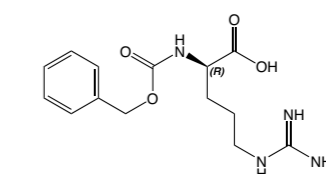
N-alpha-t-Butyloxycarbonyl-N-gamma-4-toluolsulfonyl-L-arginine

CAS-No. 13836-37-8
 Formula $C_{18}H_{28}N_4O_6S$
 Mol. weight 428,5 g/mol

**ZAA1023 Z-D-Arg-OH**

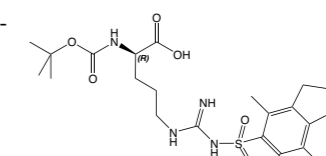
N-alpha-Benzoyloxycarbonyl-D-arginine

CAS-No. 6382-93-0
 Formula $C_{14}H_{20}N_4O_4$
 Mol. weight 308,34 g/mol

**BAA1021 Boc-D-Arg(Pbf)-OH**

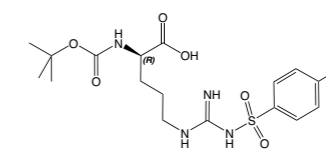
N-alpha-(t-Butyloxycarbonyl)-N'-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-D-arginine

CAS-No. 186698-61-3
 Formula $C_{24}H_{38}N_4O_7S$
 Mol. weight 526,65 g/mol

**BAA1346 Boc-D-Arg(Tos)-OH**

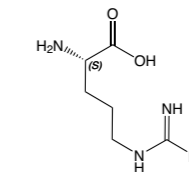
N-alpha-t-Butyloxycarbonyl-N-gamma-(4-toluolsulfonyl)-D-arginine

CAS-No. 61315-61-5
 Formula $C_{18}H_{28}N_4O_6S$
 Mol. weight 428,51 g/mol

**HAA1068 H-L-Arg-OH**

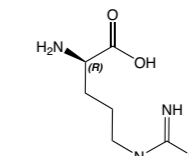
L-Arginine

CAS-No. 74-79-3
 Formula $C_6H_{14}N_4O_2$
 Mol. weight 174,2 g/mol

**HAA1008 H-D-Arg-OH**

D-Arginine, free base

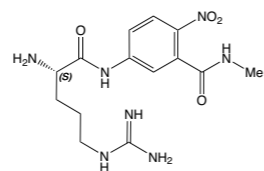
CAS-No. 157-06-2
 Formula $C_6H_{14}N_4O_2$
 Mol. weight 174,2 g/mol



HAA1195 H-L-Arg-ANBA-Me*2HCl

L-Arginine-5-amino-2-nitrobenzoic acid methylamide dihydrochloride

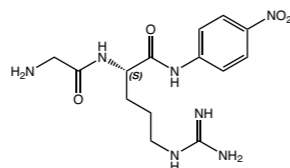
CAS-No. 2250437-20-6
 Formula $C_{14}H_{21}N_5O_4 \cdot 2HCl$
 Mol. weight 351,36*72,9 g/mol



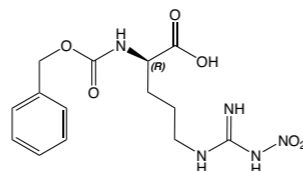
Product details

**HAA2755 H-Gly-L-Arg-pNA*2HCl**Glycyl-L-arginine *p*-nitroanilide dihydrochloride

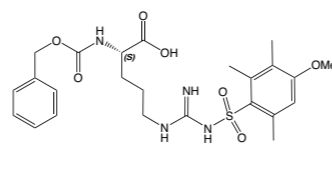
CAS-No. 103192-40-1 net
 Formula $C_{14}H_{21}N_7O_4 \cdot 2HCl$
 Mol. weight 351,36*72,9 g/mol

**ZAA1191 Z-D-Arg(NO₂)-OH**N-alpha-Benzyloxycarbonyl-*N'*-nitro-D-arginine

CAS-No. 154802-74-1
 Formula $C_{14}H_{19}N_5O_6$
 Mol. weight 353,34 g/mol

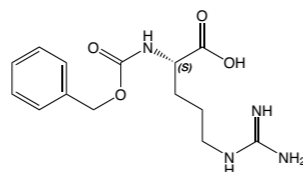
**ZAA1194 Z-L-Arg(Mtr)-OH*CHA**N-alpha-Benzyloxycarbonyl-*N'*-(4-methoxy-2,3,6-trimethylphenyl-sulfonyl)-L-arginine cyclohexylamine

CAS-No. 80745-09-1
 Formula $C_{24}H_{32}N_4O_7S \cdot C_6H_{13}N$
 Mol. weight 520,60*99,18 g/mol

**ZAA1006 Z-L-Arg-OH**

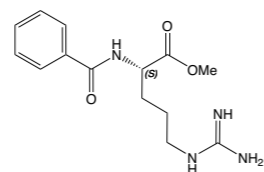
N-alpha-Benzyloxycarbonyl-L-arginine

CAS-No. 1234-35-1
 Formula $C_{14}H_{20}N_4O_4$
 Mol. weight 308,34 g/mol

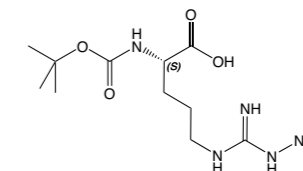
**BAA0032 Bz-L-Arg-OMe*HCl**

N-alpha-Benzoyl-L-arginine methyl ester hydrochloride

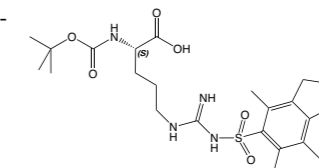
CAS-No. 1784-04-9
 Formula $C_{14}H_{20}N_4O_3 \cdot HCl$
 Mol. weight 292,32*36,45 g/mol

**BAA1066 Boc-L-Arg(NO₂)-OH**N-alpha-*t*-Butyloxycarbonyl-N-gamma-nitro-L-arginine

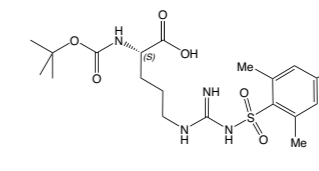
CAS-No. 2188-18-3
 Formula $C_{11}H_{21}N_5O_6$
 Mol. weight 319,32 g/mol

**BAA1067 Boc-L-Arg(Pbf)-OH**N-alpha-(*t*-Butyloxycarbonyl)-*N'*-2,2,4,6,7-pentamethyl-dihydrobenzofuran-5-sulfonyl-L-arginine

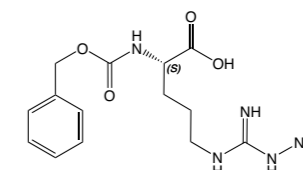
CAS-No. 200124-22-7
 Formula $C_{24}H_{38}N_4O_7S$
 Mol. weight 526,65 g/mol

**BAA6470 Boc-L-Arg(Mts)-OH**N-alpha-*t*-Butyloxycarbonyl-*N'*-(mesitylene-2-sulfonyl)-L-arginine

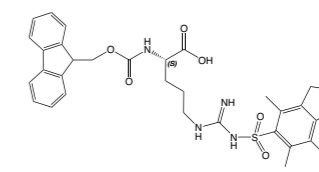
CAS-No. 68262-71-5
 Formula $C_{20}H_{32}N_4O_6S$
 Mol. weight 456,55 g/mol

**ZAA1195 Z-L-Arg(NO₂)-OH**N-alpha-Benzyloxycarbonyl-*N'*-nitro-L-arginine

CAS-No. 2304-98-5
 Formula $C_{14}H_{19}N_5O_6$
 Mol. weight 353,34 g/mol

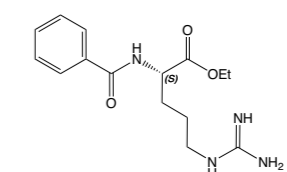
**FAA1010 Fmoc-L-Arg(Pbf)-OH**N-alpha-(9-Fluorenylmethyloxycarbonyl)-*N'*-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-L-arginine

CAS-No. 154445-77-9
 Formula $C_{34}H_{40}N_4O_7S$
 Mol. weight 648,8 g/mol

**BAA0030 Bz-L-Arg-OEt*HCl**

N-alpha-Benzoyl-L-arginine ethyl ester hydrochloride

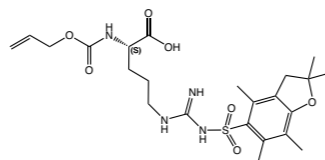
CAS-No. 2645-08-1
 Formula $C_{15}H_{22}N_4O_3 \cdot HCl$
 Mol. weight 342,82 g/mol



AAA2030 Aloc-L-Arg(Pbf)-OH

N-alpha-Allyloxycarbonyl-N'-2,2,4,6,7-pentamethyl-dihydrobenzofuran-5-sulfonyl-L-arginine

CAS-No. 783371-61-9
Formula C₂₃H₃₄N₄O₇S
Mol. weight 510,6 g/mol



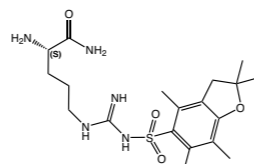
Product details



HAA3740 H-L-Arg(Pbf)-NH₂*HCl

N'-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-L-arginine amide hydrochloride

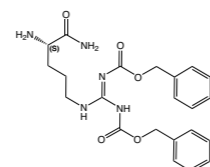
CAS-No. 1350564-36-1 net
Formula C₁₉H₃₁N₅O₄S*HCl
Mol. weight 425,55*36,45 g/mol



HAA3750 H-L-Arg(Z)2-NH₂*HCl

N',N''-bis-benzyloxycarbonyl-L-arginine amide hydrochloride

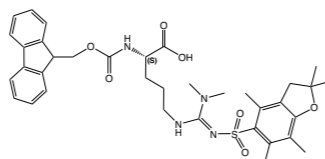
Formula C₂₂H₂₇N₅O₅*HCl
Mol. weight 441,48*36,45 g/mol



FAA4780 Fmoc-L-Arg(Me)2(Pbf)-OH (asymmetrical)

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N',N'-dimethyl-N''-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-L-arginine

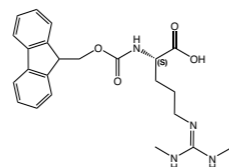
CAS-No. 1185841-84-2
Formula C₃₆H₄₄N₄O₇S
Mol. weight 676,82 g/mol



FAA4790 Fmoc-L-Arg(Me)2-OH*HCl (symmetrical)

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N',N''-dimethyl-L-arginine hydrochloride

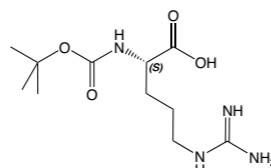
CAS-No. 1330286-46-8
Formula C₂₃H₂₈N₄O₄*HCl
Mol. weight 424,49*36,45 g/mol



BAA1069 Boc-L-Arg-OH*H₂O*HCl

N-alpha-t-Butyloxycarbonyl-L-arginine monohydrate hydrochloride

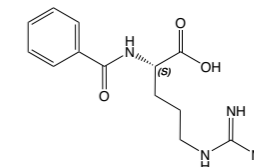
CAS-No. 114622-81-0
Formula C₁₁H₂₂N₄O₄*HCl*H₂O
Mol. weight 274,4*36,5*18,0 g/mol



BAA0031 Bz-L-Arg-OH

N-alpha-Benzoyl-L-arginine

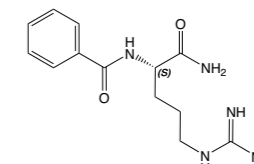
CAS-No. 154-92-7
Formula C₁₃H₁₈N₄O₃
Mol. weight 278,31 g/mol



BAA0029 Bz-L-Arg-NH₂*HCl

N-alpha-Benzoyl-L-arginine amide hydrochloride

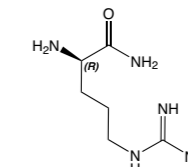
CAS-No. 4299-03-0
Formula C₁₃H₁₉N₅O₂*HCl
Mol. weight 277,32*36,45 g/mol



HAA1513 H-D-Arg-NH₂*2HCl

D-Arginine amide dihydrochloride

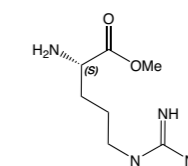
CAS-No. 203308-91-2
Formula C₆H₁₅N₅O₂*2HCl
Mol. weight 173,22*72,9 g/mol



HAA5840 H-L-Arg-OMe*2HCl

L-Arginine methyl ester dihydrochloride

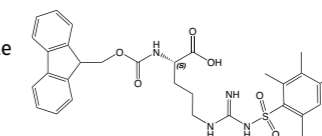
CAS-No. 26340-89-6
Formula C₇H₁₆N₄O₂*2HCl
Mol. weight 188,23*72,92 g/mol



FAA1700 Fmoc-L-Arg(Mtr)-OH solv.

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-4-methoxy-2,3,6-trimethylphenyl-sulfonyl-L-arginine solvate

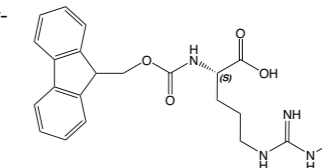
CAS-No. 98930-01-9
Formula C₃₁H₃₆N₄O₇S
Mol. weight 608,71 g/mol



FAA1701 Fmoc-L-Arg(NO₂)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-nitro-L-arginine

CAS-No. 58111-94-7
Formula C₂₁H₂₃N₅O₆
Mol. weight 441,44 g/mol



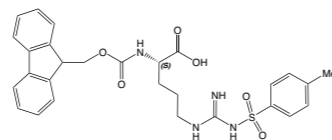
FAA1702 Fmoc-L-Arg(Tos)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-tosyl-L-arginine

CAS-No. 83792-47-6

Formula $C_{28}H_{30}N_4O_6S$

Mol. weight 550,63 g/mol



Product details

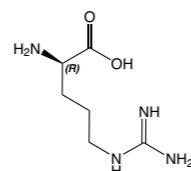
**HAA1009 H-D-Arg-OH*HCl**

D-Arginine hydrochloride

CAS-No. 627-75-8

Formula $C_6H_{14}N_4O_2 \cdot HCl$

Mol. weight 174,2*36,5 g/mol

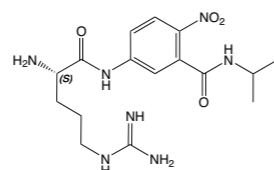
**HAA1176 H-L-Arg-ANBAiPr*2HCl**

Arginine-5-amino-2-nitrobenzoic acid isopropylamide dihydrochloride

CAS-No. 1272755-10-8

Formula $C_{16}H_{25}N_5O_4 \cdot 2HCl$

Mol. weight 379,42*72,9 g/mol

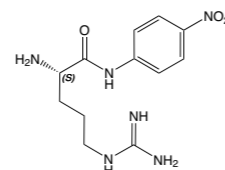
**HAA1178 H-L-Arg-pNA*2HCl**

L-Arginine p-Nitroanilide dihydrochloride

CAS-No. 40127-11-5

Formula $C_{12}H_{18}N_6O_3 \cdot 2HCl$

Mol. weight 367,22 g/mol

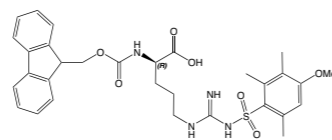
**FAA1663 Fmoc-D-Arg(Mtr)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-4-methoxy-2,3,6-trimethylphenyl-sulfonyl-D-arginine

CAS-No. 120075-24-3

Formula $C_{31}H_{36}N_4O_7S$

Mol. weight 608,69 g/mol

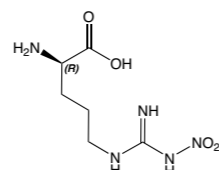
**HAA5750 H-D-Arg(NO₂)-OH**

N'-Nitro-D-arginine

CAS-No. 66036-77-9

Formula $C_6H_{13}N_5O_4$

Mol. weight 219,21 g/mol

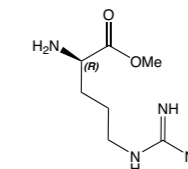
**HAA5770 H-D-Arg-OMe*2HCl**

D-Arginine methyl ester dihydrochloride

CAS-No. 78851-84-0

Formula $C_7H_{16}N_4O_2 \cdot 2HCl$

Mol. weight 261,15 g/mol

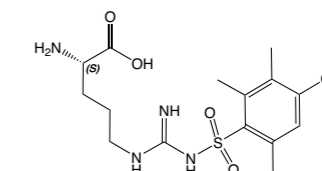
**HAA5790 H-L-Arg(Mtr)-OH**

N'-4-methoxy-2,3,6-trimethylphenyl-sulfonyl-L-arginine

CAS-No. 80745-10-4

Formula $C_{16}H_{26}N_4O_5S$

Mol. weight 386,46 g/mol

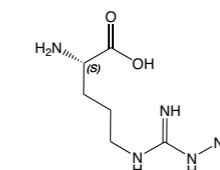
**HAA5800 H-L-Arg(NO₂)-OH**

N'-Nitro-L-arginine

CAS-No. 2149-70-4

Formula $C_6H_{13}N_5O_4$

Mol. weight 219,21 g/mol

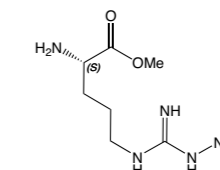
**HAA5810 H-L-Arg(NO₂)-OMe*HCl**

N'-Nitro-L-arginine methyl ester hydrochloride

CAS-No. 51298-62-5

Formula $C_7H_{15}N_5O_4 \cdot HCl$

Mol. weight 233,11*36,45 g/mol

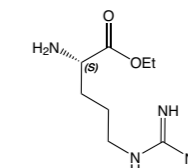
**HAA5830 H-L-Arg-OEt*2HCl**

L-Arginine ethyl ester dihydrochloride

CAS-No. 36589-29-4

Formula $C_8H_{18}N_4O_2 \cdot 2HCl$

Mol. weight 275,18 g/mol

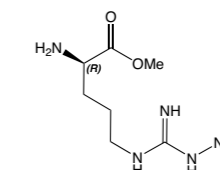
**HAA5760 H-D-Arg(NO₂)-OMe*HCl**

N'-Nitro-D-arginine methyl ester hydrochloride

CAS-No. 50912-92-0

Formula $C_7H_{15}N_5O_4 \cdot HCl$

Mol. weight 233,11*36,45 g/mol



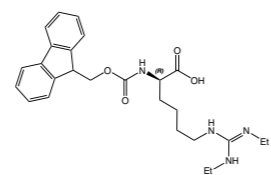
FAA7660 Fmoc-D-hArg(Et)2-OH*HCl

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N,N'-diethyl-D-homoarginine hydrochloride

CAS-No. 1386327-10-1

Formula $C_{26}H_{34}N_4O_4 \cdot HCl$

Mol. weight 466,57*36,45 g/mol



Product details

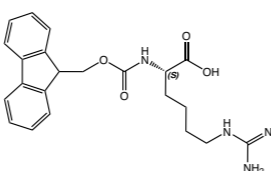

FAA8715 Fmoc-L-HArg-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-L-homoarginine

CAS-No. 776277-76-0

Formula $C_{22}H_{26}N_4O_4$

Mol. weight 410,47 g/mol

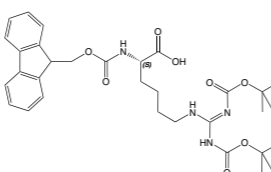

FAA1382 Fmoc-L-HArg(Boc)2-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N,N'-bis(t-butyloxycarbonyl)-L-homoarginine

CAS-No. 158478-81-0

Formula $C_{32}H_{42}N_4O_8$

Mol. weight 610,69 g/mol

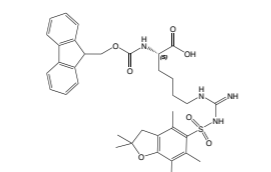

FAA1567 Fmoc-L-HArg(Pbf)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-L-homoarginine

CAS-No. 1159680-21-3

Formula $C_{35}H_{42}N_4O_7S$

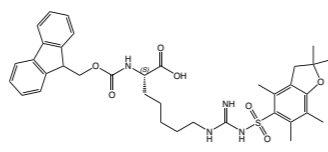
Mol. weight 662,81 g/mol


FAA9515 Fmoc-L-H2Arg(Pbf)-OH

(S)-2-(((9H-fluoren-9-yl)methoxy)carbonyl)amino)-7-(3-((2,2,4,6,7-pentamethyl-2,3-dihydrobenzofuran-5-yl)sulfonyl)guanidino)heptanoic acid

Formula $C_{36}H_{44}N_4O_7S$

Mol. weight 676,83 g/mol

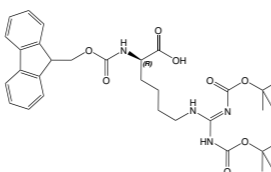

FAA1566 Fmoc-D-HArg(Boc)2-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N,N'-bis(t-butyloxycarbonyl)-D-homoarginine

CAS-No. 1301706-40-0

Formula $C_{32}H_{42}N_4O_8$

Mol. weight 610,69 g/mol

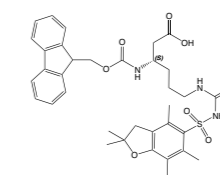

FAA6530 Fmoc-L-beta-HArg(Pbf)-OH

N-beta-(9-Fluorenylmethyloxycarbonyl)-N'-2,2,4,6,7-pentamethyldihydrobenzofuran-5-sulfonyl-L-homoarginine

CAS-No. 401915-53-5

Formula $C_{35}H_{42}N_4O_7S$

Mol. weight 662,81 g/mol

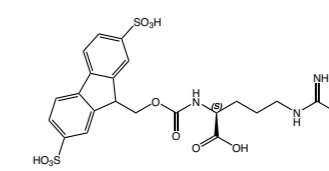

SAA1050 Smoc-L-Arg-OH

((2,7-disulfo-9H-fluoren-9-yl)methoxy)carbonyl-L-arginine potassium salt

CAS-No. 2337407-38-0

Formula $C_{21}H_{22}K_2N_4O_{10}S_2$

Mol. weight 632,74 g/mol


References:

- *Nw*-Carbamoylation of the Argininamide Moiety: An Avenue to Insurmountable NPY Y1 Receptor Antagonists and a Radiolabeled Selective High-Affinity Molecular Tool ([3H]UR-MK299) with Extended Residence Time; M. Keller, S. Weiss, C. Hutzler, K. K. Kuhn, C. Mollereau, S. Dukorn, L. Schindler, G. Bernhardt, B. König, A. Buschauer; **J. Med. Chem.** 2015; **58**: 8834-8849. <https://doi.org/10.1021/acs.jmedchem.5b00925>
- Mimicking of arginine by Functionalized *Nw*-Carbamoylated arginine As a New Broadly Applicable Approach to Labeled Bioactive Peptides: High Affinity Angiotensin, Neuropeptide Y, Neuropeptide FF, and Neurotensin Receptor Ligands As Examples; M. Keller, K. K. Kuhn, J. Einsiedel, H. Hübner, S. Biselli, C. Mollereau, D. Wifling, J. Svobodová, G. Bernhardt, C. Cabrele, P. M. L. Vanderheyden, P. Gmeiner, A. Buschauer; **J. Med. Chem.** 2016; **59**: 1925-1945. <https://doi.org/10.1021/acs.jmedchem.5b01495>
- Fluorescence Labeling of Neurotensin(8-13) via arginine Residues Gives Molecular Tools with High Receptor Affinity; M. Keller, S. A. Mahuroof, V. Hong Yee, J. Carpenter, L. Schindler, T. Littmann, A. Pegoli, H. Hubner, G. Bernhardt, P. Gmeiner, N. D. Holliday; **ACS Med Chem Lett** 2020; **11**: 16-22. <https://doi.org/10.1021/acsmchemlett.9b00462>
- Shorter arginine homologs to stabilize peptides towards tryptic digestion; P. Henklein, T. Bruckdorfer; **Chemistry Today** 2008; **6(6)**: 12-15.
- Short arginine analogs: peptide synthesis and prediction of biological effects – efficient synthesis of peptides containing short analogs of arginine and stability evaluation with docking. Prediction of biological effects of short arginine analogs using computational methods; T. A. Dzimbova, P. Henklein, T. Bruckdorfer, R. M. Maier, M. W. Weishaupt, T. I. Pajpanova; **Chimica oggi** 2019; **37**: 28.
- Extended Residence Time; M. Keller, S. Weiss, C. Hutzler, K. K. Kuhn, C. Mollereau, S. Dukorn, L. Schindler, G. Bernhardt, B. Koenig and A. Buschauer; **J. Med. Chem.** 2015; **58**: 8834-49. <https://doi.org/10.1021/acs.jmedchem.5b00925>
- Substitution of arginine with Proline and Proline Derivatives in Melanocyte-Stimulating Hormones Leads to Selectivity for Human Melanocortin 4 Receptor; H. Qu, M. Cai, A. V. Mayorov, P. Grieco, M. Zingsheim, D. Trivedi, V. J. Hruby; **J. Med. Chem.** 2009; **52(12)**: 3627-3635. <https://doi.org/10.1021/jm801300c>
- Synthesis of Proteins Containing Modified arginine Residues; A. K. Choudhury, S. Y. Golovine, L. M. Dedkova, S. M. Hecht; **Biochem.** 2007; **46(13)**: 406-4076. <https://doi.org/10.1021/bi062042r>
- Practical and Efficient Synthesis of Orthogonally Protected Constrained 4-Guanidinoproline; M. Tamaki, G. Han, V. J. Hruby; **J. Org. Chem.** 2001; **66(3)**: 1038-1042. <https://doi.org/10.1021/jo005626m>
- Conformationally restricted arginine analogs; T. R. Webb, C. Eigenbrot; **J. Org. Chem.** 1991; **56(9)**: 3009-3016. <https://doi.org/10.1021/jo00009a016>



**You could not find what you are looking for?
Further derivatives are available on custom synthesis basis!**

Empowering Peptide Innovation