

Custom Peptides

Internal Modifications and related designators

Note: some modifications are sequence dependent and will be assessed during quotation process.
Other modifications available upon request.

UAAD BY MODIFICATION

UAAD by modification	AA Modified or Placement	Sequence Notation	Example x = amino acid
Acetylation	N-terminus, K	Ac- -K(Ac)-	Ac-xx-K(Ac)-xx-
Alkyne	E, D K, Dap	-E(Alkyne)- -D(Alkyne)- -K(Alkyne)- -Dap(Alkyne)-	-xx-E(Alkyne)-xx-
Azide	F K A	-F(N3)- -K(N3)- -Aha-	-xx-F(N3)-xx-
Bromoacetylation	K N-term	-K(BrAc)-	-xx-K(BrAc)-xx-
DOTA, NOTA	N-term, K	DOTA- -K(DOTA)-	Dota-xx-K(Dota)-xx-
Formylation	K	-K(Formyl)-	-xx-K(Formylation)-xx-
Farnesylation	C	-C(Farnesyl)-	-xx-C(Farnesyl)-xx-
Geranylgeranylation	C	-C(Geranylgeranyl)-	-xx-C(Geranylgeranyl)-xx-
Glycosylation-galactose	T,S	-S(GalNac)- -T(GalNac)-	-xx-S(GalNac)-xx-
Glycosylation-glucose	S,T, N	-S(GlcNac)- -T(GlcNac)- -N(GlcNac)-	-xx-S(GlcNac)-xx-
Methylation (mono)	K,R	-K(Me1)- -R(Me1)-	-xx-K(Me1)-xx-
Methylation(di)	K	-K(Me2)-	-xx-K(Me2)-xx-
Methylation (Assymetrical)	R	-R(Me2)asy-	-xx-R(Me2)asy-xx-
Methylation (Symmetrical)	R	-R(Me2)sym-	-xx-R(Me2)sym-xx-
Methylation (Tri)	K	-K(Me3)-	-xx-K(Me3)-xx-
N-Methylation	A,G,L,F,Nva	-(N-Me-Ala)- -(N-Me-Gly)- -(N-Me-Leu)- -(N-Me-Phe)- -(N-Me-Nva)-	-xx-(N-Me-Ala)-xx-
Phosphorylation	S, T, Y	-pS-, -pT-, -pY-	-xx-pS-sxx-
Pegylation	N-terminus or K	K(PEG2) K(PEG3) K(PEG4) K(PEG5) K(PEG6) K(PEG8) K(PEG12) K(PEG2000)	PEG2-xx-K(PEG2)-xx-
Sulfated	Y	-Y(S03H)-	-xx-Y(S03H)-xx-

UAAD ON BACKBONE

UAAD on backbone	Sequence Notation	Example = amino acid
3-Ala(2-thienyl)-OH	Thi	-xx-Thi-xx-
L - 2 - aminocaproic acid	-Nle-	-xx-Nle-xx-
α - aminoisobutyric acid	-Aib-	-xx-Aib-xx-
6 - aminohexanoic acid	-LC - or -Ahx-	Biotin-LC-xxxx-
L - α - t - butylglycine	-Tle-	-xx-Tle-xx-
β -cyclohexyl-L-alanine	-Cha-	-xx-Cha-xx-
β -cyclopropyl-L-alanine	-Cpa-	-xx-Cpa-xx-
Citrulline	-Cit-	-xx-Cit-xx-
Cysteic Acid	-Cya-	-xx-Cya-xx-
Cysteine (reduced)	C* (*Cys reduced)	xx-C*xx (*Cys reduced)
Dehydroalanine Dehydroleucine Dehydroproline	-DeAla- -DeLeu- -DePro-	-xx-DeAla-xx- -xx-DeLeu-xx- -xx-DePro-xx-
L - α,β - diaminopropionic acid	-Dap-	-xx-Dap-xx-
D - α,β - diaminopropionic acid	-(D-Dap)-	-xx-(D-Dap)-xx-
(N - γ - 1 - (4,4 - dimethyl - 2,6 - dioxocyclohex - 1 - ylidene)ethyl) - L - α,β - diaminopropionic acid	-(Dab(Dde))-	-xx-(Dab(Dde))-xx-
Ornithine	-Orn-	-xx-Orn-xx-
Diphenylethylenediamine	-(D-Pen)-	-xx-(D-Pen)-xx-
L-Allothreonine	Allo-Thr	-xx-(Allo-Thr)-xx-
D-Allothreonine	D-Allo-Thr	-xx-(D-Allo-Thr)-xx-
Propargylglycine	Pra	-xx-Pra-xx-

HEAVY ISOTOPE AA CLEARPOINT™

Heavy Isotope AA ClearPoint™	AA Modified	Mass Increase (daltons)	Sequence Notation	Example x = amino acid
Ala (1 - 13C)	A	1	-A(1-13C)-	-xx-A(1-13C)-xx-
Ala (15N)	A	1	-Ala (15N)-	-xx-Ala(15N)-xx-
Ala (3 - 13C)	A	3	-Ala(3-13C)-	-xx-Ala(3-13C)-xx-
Ala (U-13C3, U-15N)	A	4	-Ala(U-13C3, U-15N)-	-xx-Ala(U-13C3, U-15N)-xx-
Arg (U-13C6, U-15N4)	R	7	-Arg(U-13C6, U-15N4)-	xx-Arg(U-13C6, U-15N4)-xx-
Asn (U-13C4, U-15N2)	N	6	-Asn(U-13C4, U-15N2)-	-xx-Asn(U-13C4, U-15N2)-xx-
Asp (U-13C4, 15N)	D	5	-Asp(U-13C4, 15N)-	-xx-Asp(U-13C4, 15N)-xx-
Cys (U-13C3, 15N)	C	4	-Cys(U-13C3, 15N)-	-xx-Cys(U-13C3, 15N)-xx-
Gln (U-13C5, U-15N2)	Q	7	-Gln(U-13C5, U-15N2)-	-xx-Gln(U-13C5, U-15N2)-xx-
Glu (U-13C5, 15N)	E	6	-Glu(U-13C5, 15N)-	-xx-Glu(U-13C5, 15N)-xx-
Gly (U-13C2, 15N)	G	3	-Gly(U-13C2, 15N)-	-xx-Gly(U-13C2, 15N)-xx-
Ile (U-13C6)	I	6	-Ile(U-13C6)-	-xx-Ile(U-13C6)-xx-
Leu (U-13C6, 15N)	L	7	-Leu(U-13C6, 15N)-	-xx-Leu(U-13C6, 15N)-xx-
Lys (U-13C6, U-15N2)	K	8	-Lys(U-13C6, U-15N2)-	-xx-Lys(U-13C6, U-15N2)-xx-
Met (U-13C5, 15N)	M	6	-Met(U-13C5, 15N)-	-xx-Met(U-13C5, 15N)-xx-
Phe (U-13C9, 15N)	F	10	-Phe(U-13C9, 15N)-	-xx-Phe(U-13C9, 15N)-xx-
Pro (U-13C5, 15N)	P	6	-Pro(U-13C5, 15N)-	-xx-Pro (U-13C5, 15N)-xx-
Ser (U-13C3, 15N)	S	4	-Ser(U-13C3, 15N)-	-xx-Ser(U-13C3, 15N)-xx-
Thr (U-13C4, 15N)	T	5	-Thr (U-13C4, 15N)-	-xx-Thr(U-13C4, 15N)-xx-
Val (U-13C5, 15N)	V	6	-Val (U-13C5, 15N)-	-xx-Val(U-13C5, 15N)-xx-

DYES & QUENCHERS

Labeling	Designator	Labeled amino acid
Biotin		
Biotin-amide*	(-Biot)	on K
LC-Biotin-amide*	(-LC-Biot)	on K
Fluorescent dyes		
CyLyte Fluor3*	(-CF3)	on K
CyLyte Fluor5*	(-CF5)	on K
CyLyte Fluor7*	(-CF7)	on K
HiLyte™ Fluor488*	(-HF488)	on K
HiLyte™ Fluor555*	(-HF555)	on K
HiLyte™ Fluor647*	(-HF647)	on K
HiLyte™ Fluor750*	(-HF750)	on K
FAM*	(-FAM)	on K or W
FITC*	(-FITC)	on K
Mca*	(-Mca)	on K
ROX*	(-ROX)	on K
Sulforhodamin101*	(-SR101)	on K
TAMRA*	(-TAMRA)	on K
Quenchers		
QXL@520*	(-Q520)	on K
QXL@570*	(-Q570)	on K
QXL@610*	(-Q610)	on K
QXL@670*	(-Q670)	on K
DABCYL*	(-DABCYL)	on K
Dnp*	(-Dnp)	on K