

Peptide Modification Services

Biomatik is proud to offer over 250 peptide modifications at very affordable prices.

Some popular modifications are: Acetylation, Amidation, Dye and fluorescent labeling (e.g. Biotin, FITC, FAM), Phosphorylation, Cyclization (disulfide bonds), Isotope labeling, Stapled peptides, CMK, FMK, Spacers (PEGylation, Amino Hexanoic Acid), KLH or BSA Conjugations.

Biomatik also provides Glycopeptide modifications, such as Ser/Thr (GlcNAc), Ser/Thr (GalNAc), Ser/Thr (Gal-GalNAc), etc.

Peptide Modification List from Biomatik

Last update: January 25, 2021

N terminus Modification

H (free amine)
Ac (Acetylation)
Fmoc
CBZ
Bz
Bz(4-F)
Bz(4-NO₂)
Pyr
D-Pyr
LA-
Mpa-
Mal-b-Ala
Mal-Acp
Aoa

N terminus Fatylation

For (Formylation)
2-Br-Ac
2-Cl-Ac
2-I-Ac
OH-Ac-
But-
Suc
MeOSuc
Iba
Hex-
5-heptenoic acid
5-Hexynoic acid
heptanedioic acid
Oct-

Dec-
Sebacic acid
Lau-
Myr-
Pal-
Ste-
Octanedioic acid
Oleic Acid-

C terminus Modification

-OH (free acid)
-NH₂ (Amidation)
Cysteamide, -Cya
-AMC
-OMe
-OEt
-OBzl
-OtBu
-NHMe
-NHEt
-TBzl
p-Nitroanilide

D Form Amino Acid

{D-Ala}
{D-Arg}
{D-Asp}
{D-Asn}
{D-Cys}
{D-Glu}
{D-Gln}
{D-His}
{D-Allo-Ile}
{D-Ile}
{D-Leu}
{D-Lys}
{D-Met}
{D-Pro}
{D-Phe}
{D-Ser}
{D-Tyr}
{D-Thr}
{D-Trp}
{D-Val}

Unusual Amino Acid

{Beta-Asp}
{D-Beta-Asp}
{Gamma-Glu}
{D-Gamma-Glu}
Cys(Cam)

D-Cys(Cam)
{Cys(Acm)}
{Cys(tBu)}
{Met(O)}
{D-Met(O)}
{Met(O)2}
{D-Met(O)2}
{Lys(Ac)}
{Ac-Lys}
{Lys(Dde)}
{Tle}
{D-Ser(octanoic acid)}
2-Thi
3-Thi
{Aib}
{Abu}
{D-Abu}
{Hyp}
{Phg}
{D-Phg}
{Nva}
{D-Nva}
{Norleucine}
{D-Nle}
{Cit}
{D-Cit}
{Orn}
{D-Orn}
{Pen}
{D-Pen}
{Cpg}
{Cha}
{D-Cha}
{Chg}
{D-Chg}
{Dab}
{Dap}
Pra
D-Pra
Allo-Thr
D-Allo-Thr
{D-1-Nal}
{L-1-Nal}
{D-2-Nal}
{L-2-Nal}
{D-2-Pal}
{L-2-Pal}
{D-3-Pal}
{L-3-Pal}
{D-4-Pal}

{L-4-Pal}
{Oic}
{Tic}
{D-Tic}
X (20 kinds amino acids mixture with equal mol)

Dye and Fluorescent Labeling

Biotin-
-Lys(Biotin)-
-Lys(Biotin)
Biotin-Ahx-
FITC-
-Lys(FITC)-
-Lys(FITC)
FITC-Ahx-
(FITC: *Fluorescein Isothiocyanate*)
5-FAM-
5,6-FAM
6'FAM
-Lys(5-FAM)-
Lys(5,6-FAM)
-Lys(5-FAM)
5-FAM-Ahx-
Dansyl-
-Lys(Dansyl)-
-Lys(Dansyl)
Dansyl-Ahx-
5-TAMRA-
5(6)-TAMTA-
-Lys(TAMRA)-
-Lys(5-TAMRA)
{5-TAMRA-Acp}
{Lys(Dnp)}
{D-Lys(Dnp)}
{Dab(Dnp)}
Dap(Dnp)
MCA-
-Lys(MCA)-
-Lys(MCA)
Rhodamine B-
Lys(Rhodamine B)

Phe/Tyr Analogs Amino Acid

{D-2-Cl-Phe}
{L-2-Cl-Phe}
{D-3-Cl-Phe}
{L-3-Cl-Phe}
{D-4-Cl-Phe}
{L-4-Cl-Phe}
{D-3,4-DiCl-Phe}

{L-3,4-DiCl-Phe}
{D-4-Br-Phe}
{L-4-Br-Phe}
{D-3-F-Phe}
{L-3-F-Phe}
{D-4-F-Phe}
{L-4-F-Phe}
{D-4-NO₂-Phe}
{L-4-NO₂-Phe}
{D-4-I-Phe}
{L-4-I-Phe}
{D-3-CN-Phe}
{L-3-CN-Phe}
{D-4-CN-Phe}
{L-4-CN-Phe}
{D-2-Me-Phe}
{L-2-Me-Phe}
{D-4-Me-Phe}
{L-4-Me-Phe}
{D-4-NH₂-Phe}
{L-4-NH₂-Phe}
{D-3-Cl-Tyr}
{L-3-Cl-Tyr}
{D-3,5-DiCl-Tyr}
{L-3,5-DiCl-Tyr}
{D-3,5-DiBr-Tyr}
{L-3,5-DiBr-Tyr}
{D-3-I-Tyr}
{L-3-I-Tyr}
{D-3,5-DiI-Tyr}
{L-3,5-DiI-Tyr}
{D-3-NO₂-Tyr}
{L-3-NO₂-Tyr}
{D-3,5-DiNO₂-Tyr}
{L-3,5-DiNO₂-Tyr}
{L-3-F-Tyr}

Homo Amino Acid

{Har}
{D-Har}
{HomoCit}
{D-HomoCit}
{HomoLeu}
{HomoPro}
{D-HomoPro}
{beta-Homolle}
{beta-HomoLeu}
{beta-HomoMet}
{beta-HomoPro}
{beta-HomoVal}
{Abz}

o-Abz- (o-aminobenzoic acid)

{Tyr(3-NO₂)}

{Glu(EDANS)}

{DABCYL}

{Lys(DABCYL)}

{Lys(Abz)}

MAPS and Carrier Complex

{Symmetric 2 Branches}

{Symmetric 4 Branches}

{Symmetric 8 Branches}

Lys(Maleimide)

Lys(Mpa)

Lys(Pra)

Lys(Suc)

Lys(glutaryl)

Lys(pGlu)

Lys(For)

Lys(2-Br-Ac)

Lys(Butanoyl)

Lys(Crotonyl)

{Lys(octenyl)}

lys(Ma)

Lys(Pal)

Lys(Oleic Acid)

Lys(Acryl)

Lys(alkine)

Lys(Alloc)

Lys(Aoa)

Lys(cyclopropanecarboxyl)

{Lys(3,5-diiodo-4-hydroxybenzoyl)}

Lys(Methacryl)

Lys(propargyl)

Lys(propionyl)

Lys(Pyruvoyl)

{BSA-Peptide N terminus}

{BSA-peptide C terminus}

{BSA-Peptide via Cys}

{KLH-Peptide N terminus}

{KLH-Peptide C terminus}

{KLH-peptide via Cys}

{OVA-Peptide N terminus}

{OVA-peptide C terminus}

{OVA-peptide via Cys}

Atom Linker

{betaAla}

{Ava}

{Ahx}

{8-Aoc}

{AEA}

{Ado}

{ANP Linker}

Methyl Amino Acids

{Lys(Me)}

{Lys(Me2)}

{Lys(Me3)}

N-Methyl amino acid

{N-Me-Ala}

{N-Me-Phe}

{N-Me-Leu}

{N-Me-Ile}

{N-Me-Val}

{N-Me-Met}

{N-Me-Nle}

{N-Me-Nva}

{Sar}

{N-Me-Ser}

{N-Me-Tyr}

{N-Me-Thr}

{N-Me-Asp}

{N-Me-Glu}

N-Me-beta-Ala

Cyclic Peptide

{Mono Disulfide bridge}

{Double Disulfide bridge}

{Triple Disulfide bridge}

{Random Disulfide bridge}

{Same Seq. Inter-Disulfide bridge }

{Different Inter-Disulfide bridge}

{Amide cyclic (end)}

Phosphorylation

{pSer}

{pTyr}

{pThr}

{D-pSer}

{D-pTyr}

{D-pThr}

{Di-sites in sequence}

{Tri-sites in sequence}

PEG

{Mini-PEG}

{Mini-PEG2}

{Mini-PEG3}

{PEG4}

{PEG-6}

{PEG8}

{PEG-11}

{PEG-12}

Isotope Labeling

H₂ (deuterium)

N¹⁵

C¹³

¹³C¹⁵N-K (C-terminal)

¹³C¹⁵N-R (C-terminal)

¹³C¹⁵N-A (C-terminal)

¹³C¹⁵N-I (C-terminal)

¹³C¹⁵N-L (C-terminal)

¹³C¹⁵N-F (C-terminal)

¹³C¹⁵N-P (C-terminal)

¹³C¹⁵N-V (C-terminal)

Stapled Peptides

Single stapled S5 and S5

Single stapled S5 and R8

Single stapled R8 and R8

Double stapled S5 and S5

Double stapled S5 and R8

Double stapled R8 and R8

Glycopeptides (Glycosylated Peptides)

N-linked glycopeptide synthesis

O-linked glycopeptide synthesis

C-linked glycopeptide synthesis

S-linked glycopeptide synthesis

Glycopeptides containing monosaccharides, such as Ser/Thr (GlcNAc), Ser/Thr (GalNAc), Asn (GlcNAc), Ser (Xyl), Thr (Man), etc.

Glycopeptides containing oligosaccharides, such as Ser/Thr (Gal-GalNAc), Ser/Thr (Neu-Gal-GalNAc), Asn (Fuc-GlcNAc), etc.

Misc

FMK, CMK

N6-Octanoyl

Photocleavable peptides

propargyl-gly

Lys(Myristoyl)

pNA

Lys(N³)