

Peptide Synthesis

– Synthesis of Peptide Analogs –

Our peptide synthesis

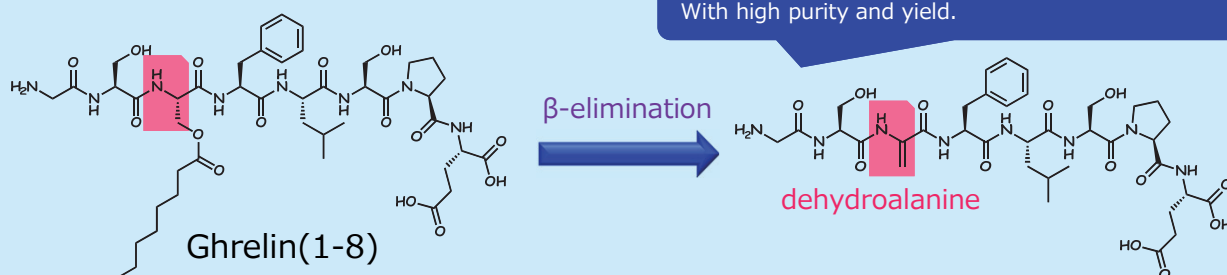
- High quality (high purity) & fast turn around
- Technology to produce peptides ≥ 100 residues
- A variety of site-selective modifications

Chemical modifications

| | |
|---|--|
| Amino group (<i>N</i> -terminal, Lys, etc.) | acetylation, biotinylation, palmitoylation, methylation (Lys, Arg) , etc. fluorescent labeling (FAM, FITC, TAMRA, etc.) |
| Carboxyl group (<i>C</i> -terminal, Glu, etc.) | amidation, esterification, thioesterification, etc. |
| Sulfhydryl group (Cys, etc.) | carboxymethylation, carbamidomethylation, disulfide bond formation, etc. |
| Hydroxy group (Ser, Thr, Tyr, etc.) | phosphorylation, sulfuration, esterification, etc. |
| Cyclization | lactam bridge (head to tail, Lys-Glu, etc.) , thioetherification, thiolactone, triazole formation (azide-alkyne cycloaddition) |
| Others | PEGylation (amino group, sulfhydryl group), stable isotope-labeling (Leu[$^{13}\text{C}_6$, ^{15}N], Phe[$^{13}\text{C}_9$, ^{15}N], etc.), incorporation of D-amino acids and unnatural amino acids |

Peptide Analogs

| | |
|----------|--|
| Cys | sulfonylation [Cys(O) $_2$ OH], disulfide bond formation (Intra- and inter-molecular), matylation, t-butylation, etc. |
| Met | sulfoxide [Met(O)], sulfone [Met(O) $_2$] |
| Asp | β -Asp (iso-Asp), D-Asp |
| Glu | pyroglutamylation (<i>N</i> -terminal), amidation |
| Asn, Gln | deamination, pyroglutamylation (Gln, <i>N</i> -terminal) |
| Others | <u>dehydroalanine (Dha)-containing peptides</u> |



We also offer you a variety of services (structural analysis, characterization, etc.). Please try our one-stop service.