

Osteocalcin (1-49) (human)

PRODUCT DESCRIPTION

Osteocalcin (1-49) (human) is a 76-amino-acid synthetic peptide. A synthetic peptide used as a research tool in biochemistry, pharmacology, and biomedical research. This peptide enables the study of protein-protein interactions, receptor binding, enzyme substrate specificity, and signal transduction pathways. Available in high purity (>=95% by HPLC) as a lyophilized powder for reconstitution in appropriate buffers.

PRODUCT SPECIFICATIONS

Catalog Number	BPT1125
CAS Number	136461-80-8
Molecular Weight	5929.4179 Da
Molecular Formula	C269H381N67O82S2
Purity	Peak Area by HPLC >=95%
Form	Lyophilized
Source	Synthetic (Chemical Synthesis, SPPS)
Endotoxin	N/A (Synthetic peptide)

AMINO ACID SEQUENCE

One-Letter Code:

YLYQWLGAPVPYPDPL{Gla}PRR{Gla}VC{Gla}LNPDCELADHIGFQEAYRRFYGPV(Disulfidebridge:Cys23-Cys29)

Three-Letter Code:

H-Tyr-Leu-Tyr-Gln-Trp-Leu-Gly-Ala-Pro-Val-Pro-Tyr-Pro-Asp-Pro-Leu-{Gla}-Pro-Arg-Arg-{Gla}-Val-Cys-{Gla}-Leu-Asn-Pro-Asp-Cys-Asp-Glu-Leu-Ala-Asp-His-Ile-Gly-Phe-Gln-Glu-Ala-Tyr-Arg-Arg-Phe-Tyr-Gly-Pro-Val-OH(Disulfidebridge:Cys23-Cys29)

RESEARCH APPLICATIONS

Application	Receptor binding
Biomarker Target	PTH Receptor (PTH1R)
Research Area	Endocrinology
Sub-category	Parathyroid Hormone & Bone Metabolism

STORAGE & HANDLING

Storage Temperature	-20 deg C
Form	Lyophilized
Stability	Lyophilized product stable for 24 months at -20 deg C
Reconstitution	Reconstitute in sterile water or appropriate buffer
After Reconstitution	Aliquot and store at -20 to -80 deg C
Avoid	Repeated freeze-thaw cycles

AVAILABLE SIZES

Size Options	1 mg, 10 mg
Usage	Research use

QUALITY CONTROL

Purity Method	HPLC, Mass Spectrometry (MS)
Identity	Confirmed by ESI-MS or MALDI-TOF
Purity	Peak Area by HPLC >=95%
Documentation	Certificate of Analysis (CoA) available upon request