

[D-Ala2,DMet5] Enkephalin

PRODUCT DESCRIPTION

[D-Ala2,DMet5] Enkephalin is a 5-amino-acid An endogenous opioid pentapeptide that binds delta-opioid receptors (DOR) with high affinity and mu-opioid receptors (MOR) with moderate affinity. Enkephalins mediate analgesic, anxiolytic, and reward signaling in the central and peripheral nervous systems. Used in pain, addiction, and neuropharmacology research for studying opioid receptor selectivity, signaling mechanisms, and non-addictive analgesic development.

PRODUCT SPECIFICATIONS

Catalog Number	BPT2223
CAS Number	100929-50-8
Molecular Weight	587.6862 Da
Molecular Formula	C28H37N5O7S1
Purity	Peak Area by HPLC >=95%
Form	Lyophilized
Source	Synthetic (Chemical Synthesis, SPPS)
Endotoxin	N/A (Synthetic peptide)

AMINO ACID SEQUENCE

One-Letter Code:

YaGFm

Three-Letter Code:

H-Tyr-{D-Ala}-Gly-Phe-{D-Met}-OH

RESEARCH APPLICATIONS

Application	Receptor binding
Biomarker Target	delta-Opioid Receptor (DOR)
Research Area	Neuroscience
Sub-category	Opioid Signaling & Pain

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
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Usage

Research use

QUALITY CONTROL

Purity Method

HPLC, Mass Spectrometry (MS)

Identity

Confirmed by ESI-MS or MALDI-TOF

Purity

Peak Area by HPLC $\geq 95\%$

Documentation

Certificate of Analysis (CoA) available upon request