

Oxytocin

PRODUCT DESCRIPTION

Oxytocin is a cyclic nonapeptide hormone synthesized in the hypothalamus. Modulates social cognition, bonding, trust, and emotional processing. Essential for uterine contraction (parturition) and milk ejection (lactation). Clinically approved as Pitocin for labor induction and postpartum hemorrhage.

PRODUCT SPECIFICATIONS

Catalog Number	BPT2922
CAS Number	50-56-6
Molecular Weight	1007.19 Da
Molecular Formula	C43H66N12O12S2
Purity	Peak Area by HPLC >=95%
Form	Lyophilized
Source	Synthetic (Chemical Synthesis, SPPS)
Endotoxin	N/A (Synthetic peptide)

AMINO ACID SEQUENCE

One-Letter Code:
Cys-Tyr-Ile-Gln-Asn-Cys-Pro-Leu-Gly-NH2 (Disulfide: Cys1-Cys6)

Three-Letter Code:
Cys-Tyr-Ile-Gln-Asn-Cys-Pro-Leu-Gly-NH2

RESEARCH APPLICATIONS

Application	Receptor binding
Biomarker Target	Oxytocin Receptor (OTR)
Research Area	Reproductive Biology
Sub-category	Oxytocin & Social Behavior

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