

Rev04
Update: May,23,2022

DATASHEET

Oxytocin

Cat. No.: RP10407

Overview

Synonyms	OTHuman Oxytocin
Description	Oxytocin is synthesized in the hypothalamus and involved in the control of lactation and parturition. Oxytocin is secreted within the brain and from a few other tissues, including the ovaries and testes. GenScript's Synthetic Human Oxytocin is a single, non-glycosylated, polypeptide chain containing nine amino acids and having a molecular mass of 1,007.2 Da. Oxytocin differs from antidiuretic hormone in two of the nine amino acids. Both hormones are packaged into granules and secreted along with carrier proteins called neurophysins. Human Oxytocin indirectly stimulates uterine smooth muscle contractions and stimulates the mammary glands to increase lactation without increasing the production of milk.
Cas No	50-56-6
Sequence	{CYS}{TYR}{ILE}{GLN}{ASN}{CYS}{PRO}{LEU}{GLY}-NH ₂
Sequence Shortening	CYIQNCPLG-NH ₂
Molecular Formula	C ₄₃ H ₆₆ N ₁₂ O ₁₂ S ₂
C Terminal	NH ₂
Disulfide Bridge	Cys1-Cys6
Molecular Weight	1007.2

Properties

Purity	> 95%
Solubility	Soluble in water. The contents of this vial have been accurately determined. Both the stopper and the vial have been siliconized. Do not attempt to weight out a smaller portion of the contents.
Form	Lyophilized
Storage	Store at -20°C after delivery. For short period of up to one week, the solution may be stored at 4°C. For longer periods, store below -20°C. It is also recommended that a carrier protein (0.1% HSA or BSA) be added for long-term storage. Avoid repeated freeze-thaw cycles.

Examples

