

Product datasheet

Oxytocin, Reproductive hormone ab120186

[3 References](#) [2 Images](#)

Overview

Product name	Oxytocin, Reproductive hormone
Description	Reproductive hormone
Biological description	Involved in many aspects of mammalian reproduction as well as other physiological processes such as bond pairing and cardiovascular homeostasis.
CAS Number	50-56-6
Chemical structure	<chem>Cys-Tyr-Ile-Gln-Asn-Cys-Pro-Leu-Gly-NH2</chem> (Disulfide bridge: 1-6)

Properties

Molecular weight	1007.19
Molecular formula	$C_{43}H_{66}N_{12}O_{12}S_2$
Sequence	CYIQNCPLG (Modifications: C-terminal amide; Disulfide bonds: 1-6)
PubChem identifier	439302
Storage instructions	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in water
Handling	<p>Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one week. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.</p> <p>Toxic, refer to SDS for further information.</p> <p>Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.</p>
Source	Synthetic

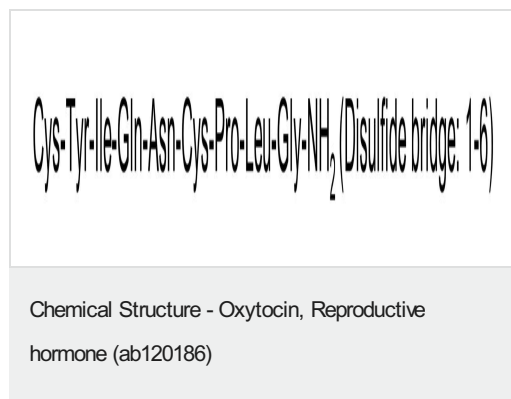
Applications

The **Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab120186 in the following tested applications.

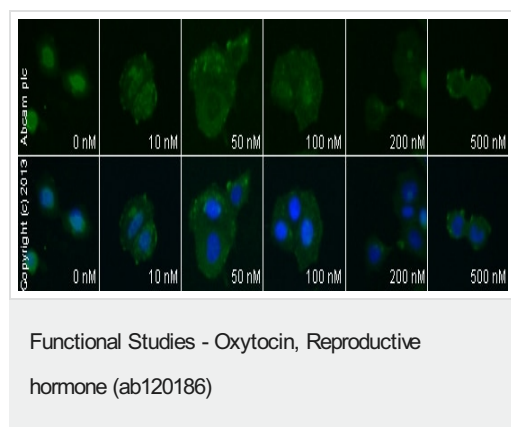
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



2D chemical structure image of ab120186, Oxytocin, Reproductive hormone



ab87312 staining oxytocin receptor in MCF7 cells treated with oxytocin (ab120186), by ICC/IF. Increase of cytoplasmic oxytocin receptor localization and correspondent decrease in nuclear oxytocin receptor correlates with increased concentration of oxytocin, as described in literature.

The cells were incubated at 37°C for 15 minutes in media containing different concentrations of ab120186 (oxytocin) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab87312** (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 donkey anti-goat polyclonal antibody (**ab96931**) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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