DATA SHEET

Product overview

Name	CELT-502 - Oxytocin receptor fluorescent antagonist (650/667)
	(LIT-01-556)
Short description	Potent and selective oxytocin receptor (OTR) fluorescent antagonist
Biological description	CELT-502 is a non peptidic and fluorescent antagonist for OTR with a high-affinity and selectivity (K_i = 1.59 nM (OTR), >1000 nM (V1aR and V1bR), 509 nM (V2R) determined by TR-FRET binding assay).
Biological action	Modulation of OTR by orthosteric antagonism
Quantity	10 µg
Purity	> 95%

Properties

Molecular Weight	1362.88
Source	Synthetic
Appearance	Dark blue solid
Formulation	Lyophilized solid
Excitation	650 nm
Emission	667 nm
Pharmacological validation	The antagonism activity of CELT-502 for OTR was determined by the measurement of inositol phosphate accumulation (Kinact = 5.5 nM) and the affinity by TR-FRET binding assay (K_i = 1.59 nM).

Validated applications

TR-FRET binding assay	CELT-502 has been validated for the development of a TR-FRET based assay for OTR, validated by competition experiments with known agonist/antagonist ligands.[1] This assay is readily amenable to high throughput screening.
Live-imaging confocal microscopy	CELT-502 has been validated to specifically visualize OTR at the cells surface.

Storing and Using product

Storage instructions	-20 °C (protect from light)
Solubility overview	Soluble in DMSO
Stock solution	Add 73 µL of DMSO to obtain a 100 µM solution
Handling	After thawing individual aliquots for use, we recommend briefly sonicating the sample to ensure it is fully dissolved and the solution is homogeneous. We do not recommend using the product after subjecting it to repetitive freeze-thaw cycles.
Shipping conditions	The product, as a solid, is stable at ambient temperature for periods of up to a few days and does not require shipping on ice/dry ice.
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References

[1]Karpenko, Iuliia A.; Margathe, Jean-Francois; Rodriguez, Thieric; Pflimlin, Elsa; Dupuis, Elodie; Hibert, Marcel; Durroux, Thierry; Bonnet, Dominique. Journal of Medicinal Chemistry 2015, 58(5), 2547-2552. DOI: 10.1021/jm501395b.