



DATA SHEET

Product overview

Name	LUXendin645 glucagon-like peptide-1 receptor (GLP1R) fluorescent antagonist (645/664) (CELT-112)
Code	CELT-112
Short description	Potent glucagon-like peptide-1 receptor (GLP1R) antagonist
Biological action	Modulation of glucagon-like peptide-1 receptor (GLP1R) by orthosteric antagonism. It shows an $pEC_{50} = 7.5$ for GLP1R. ^[1]
Quantity	3 nmol
Purity	> 97%

Properties

Molecular Weight	3991.7 Da (for M ⁺)
Source	Synthetic
Appearance	Dark blue solid
Formulation	Solid powder
Excitation	645 nm
Emission	664 nm
Pharmacological validation	The efficacy and potency of LUXendin645 (CELT-112) as a GLP1R ligand was confirmed by inhibition of GLP-1-stimulated cAMP levels in SNAP-GLP1R:HEK293 cells.

Applications

Experimental use	LUXendin645 (CELT-112) has been used in a variety of imaging applications, including widefield/confocal/2-photon microscopy in live and fixed mammalian cells and tissue ^[1] . Using TR-FRET, LUXendin645 was used in GLP1R competitive binding experiments ^[2] and in GLP1R trafficking and recycling studies ^[3,4] .
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Storing and Using product

Storage instructions	-20 °C (protect from light)
Solubility overview	Soluble in DMSO, PBS, and dH ₂ O
Stock solution	Add 30 µL of dH ₂ O to obtain a 100 µM solution
Handling	After thawing individual aliquots for use, we recommend to homogenize the sample by up- and down-pipetting to ensure it is fully dissolved. 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] J. Ast, A. Arvaniti, N. H. F. Fine, D. Nasteska, F. B. Ashford, Z. Stamataki, Z. Koszegi, A. Bacon, B. J. Jones, M. A. Lucey, S. Sasaki, D. I. Brierley, B. Hastoy, A. Tomas, G. D'Agostino, F. Reimann, F. C. Lynn, C. A. Reissaus, A. K. Linnemann, E. D'Este, D. Calebiro, S. Trapp, K. Johnsson, T. Podewin, J. Broichhagen, D. J. Hodson, *Nat Commun* **2020**, *11*, 467.
- [2] A. Marzook, S. Chen, P. Pickford, M. Lucey, Y. Wang, I. R. Corrêa Jr, J. Broichhagen, D. J. Hodson, V. Salem, G. A. Rutter, T. M. Tan, S. R. Bloom, A. Tomas, B. Jones, *Biochemical Pharmacology* **2021**, *190*, 114656.
- [3] M. Lucey, T. Ashik, A. Marzook, Y. Wang, J. Goulding, A. Oishi, J. Broichhagen, D. J. Hodson, J. Minnion, Y. Elani, R. Jockers, S. J. Bridson, S. R. Bloom, A. Tomas, B. Jones, *Mol Pharmacol* **2021**, DOI 10.1124/molpharm.121.000270.
- [4] Z. Fang, S. Chen, P. Pickford, J. Broichhagen, D. J. Hodson, J. Ivan R. Corrêa, S. Kumar, F. Görlitz, C. Dunsby, P. M. W. French, G. A. Rutter, T. Tan, S. R. Bloom, A. Tomas, B. Jones, *ACS Pharmacology & Translational Science* **2020**, DOI 10.1021/acsptsci.0c00022.