

Product Data Sheet

Product Name: (R)-Octopamine

Cat. No.: GC79263

Chemical Properties

Cas. No. 876-04-0

Formula $C_8H_{11}NO_2$

M.Wt 153.18

Solubility

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

(R)-Octopamine is a Gs-coupled receptor agonist. (R)-Octopamine binds to the orthosteric site of BmOAR2 and interacts with the Asp115, Ser202 and Tyr300 residues to activate the receptor, which couples to Gs protein and thereby stimulates adenylate cyclase activity [1].

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

In Vitro, (R)-Octopamine (0.1 nM-10 μ M; 20 min after IBMX preincubation) potently activates wild-type BmOAR2 in HEK-293 cells to elevate intracellular cAMP levels, with an EC₅₀ of approximately 1.0 nM and maximum response at 10 nM^[1]. (R)-Octopamine interacts with BmOAR2 via hydrogen bonds between its phenolic OH group and Ser202/Tyr300, and between its NH₂/β-OH groups and Asp115^[1].

References:

[1]. Xi Chen, et al. Amino acid residues involved in the interaction with the intrinsic agonist (R)-octopamine in the BETA.-adrenergic-like octopamine receptor from the silkworm Bombyx mori. Journal of Pesticide Science 36(4):473-480.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA