

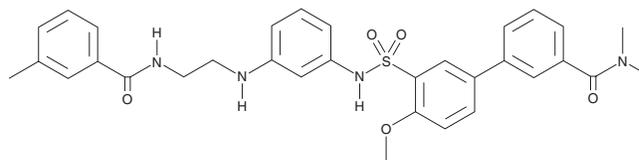
# PRODUCT INFORMATION



## Orexin 2 Receptor Agonist

Item No. 22937

**CAS Registry No.:** 1796565-52-0  
**Formal Name:** 4'-methoxy-N,N-dimethyl-3'-[[[3-[[2-[[3-methylbenzoyl]amino]ethyl]amino]phenyl]amino]sulfonyl]-[1,1'-biphenyl]-3-carboxamide  
**Synonym:** OX2R  
**MF:** C<sub>32</sub>H<sub>34</sub>N<sub>4</sub>O<sub>5</sub>S  
**FW:** 586.7  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 210, 252 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Orexin 2 receptor agonist is supplied as a crystalline solid. A stock solution may be made by dissolving the orexin 2 receptor agonist in the solvent of choice, which should be purged with an inert gas. Orexin 2 receptor agonist is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of orexin 2 receptor agonist in these solvents is approximately 20 and 25 mg/ml, respectively.

Orexin 2 receptor agonist is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, orexin 2 receptor agonist should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Orexin 2 receptor agonist has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Orexin 2 receptor agonist is an agonist of the orexin 2 receptor (OX2R) with an EC<sub>50</sub> value of 23 nM in a calcium influx assay.<sup>1</sup> It is 70-fold selective for OX2R over OX1R (EC<sub>50</sub> = 1,616 nM).

### Reference

1. Nagahara, T., Saitoh, T., Kutsumura, N., *et al.* Design and synthesis of non-peptide, selective orexin receptor 2 agonists. *J. Med. Chem.* **58**(20), 7931-7937 (2015).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/08/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM