
Product Data Sheet

Product Name: ML-031
Cat. No.: GC11668

Chemical Properties

Cas. No. 852230-33-2

Chemical Name 1-[2-[2,5-dimethyl-1-(phenylmethyl)-1H-pyrrol-3-yl]-2-oxoethyl]-2,5-pyrrolidinedione

SMILES CC1=CC(C(CN2C(CCC2=O)=O)=O)=C(C)N1CC3=CC=CC=C3

Formula $C_{19}H_{20}N_2O_3$ M.Wt 324.4

Solubility $\leq 5\text{mg/ml}$ in ethanol; 5mg/ml in DMSO 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

ML-031 is an agonist of S1P2 with EC50 value of $1\ \mu\text{M}$ [1].

Sphingosine 1-phosphate (S1P) is a bioactive lysophospholipid mediator mainly released from activated platelets and implicated in many biological responses, such as cell proliferation, migration, survival, and differentiation [1]. Sphingolipids belong to a family of bioactive molecules with cell signaling properties. Sphingosine 1-phosphate (S1P) is widely expressed on various tissues and cell types. S1P is a pleiotropic lysophospholipid mediator exists in plasma and is released in large amounts from activated platelets [1]. Until now, five sphingosine-1-phosphate receptors (S1PR1-S1PR5) have been identified. S1PR4 and S1PR5 are prominently expressed in the immune and nervous systems, respectively. S1P functions by binding to five distinct G protein-coupled receptors, S1P1/EDG-1, S1P2/EDG-5, S1P3/EDG-3, S1P4/EDG-6, and S1P5/EDG-8.

ML-031 activated S1P2 with an EC50 value of $1\ \mu\text{M}$ in a S1P reporter assay [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

Reference:

[1] Satsu H, Schaeffer M T, Guerrero M, et al. A sphingosine 1-phosphate receptor 2 selective allosteric agonist[J]. Bioorganic & medicinal chemistry, 2013, 21(17): 5373-5382.

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