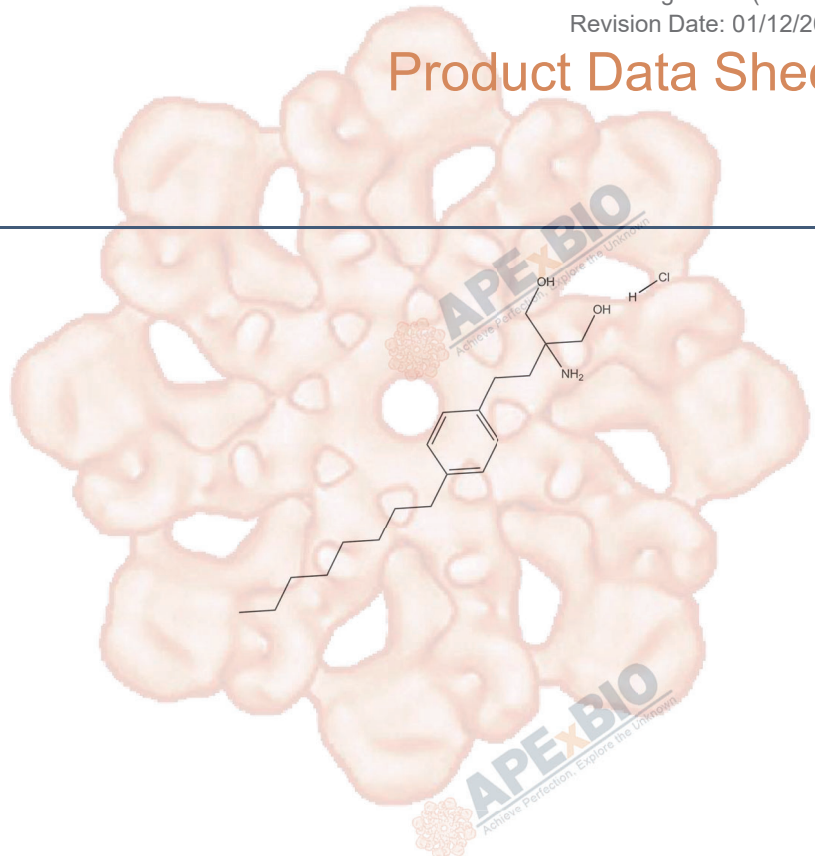


Product Data Sheet

Fingolimod (FTY720)

Cat. No.:	A8548
CAS No.:	162359-56-0
Formula:	C ₁₉ H ₃₄ ClNO ₂
M.Wt:	343.94
Synonyms:	Gilenia; FTY 720; FTY-720
Target:	GPCR/G protein
Pathway:	S1P receptor
Storage:	Store at -20°C



Solvent & Solubility

≥ 17.2mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
		1 mM	2.9075 mL	14.5374 mL	29.0748 mL
		5 mM	0.5815 mL	2.9075 mL	5.8150 mL
		10 mM	0.2907 mL	1.4537 mL	2.9075 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

S1P receptors agonist

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	MCF-7, MDA-MB-231, Sk-Br-3, HCT-116 and SW620 cells
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	IC ₅₀ : 79.1 μM (MCF-7), 59.9 μM (MDA-MB-231), 72.9 μM (Sk-Br-3), > 100 μM (HCT-116) and 40.0 μM (SW620); 48 hours

	Applications:	The IC50 values of fingolimod were determined by a WST-1 assay. The results demonstrated that treatment of the compound caused cell death in a dose-dependent manner. Fingolimod exhibited comparatively low IC50 values within the concentration range of 5-7µM for all of the cells tested in this study.
In Vivo	Animal experiment	
	Animal models:	C57BL/6J mice
	Dosage form:	Intraperitoneal injection, 0.1 mg per kg of body weight
	Applications:	As early as 30 min after injection of fingolimod (0.1 mg per kg of body weight), the levels of phosphorylated ERK1/2 (pERK1/2) were significantly increased in hippocampal neurons. After an additional 30 min, BDNF mRNA levels were elevated, and protein levels were significantly increased in the hippocampus, the cortex, and the striatum after 48 h.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1] Nagaoka Y, Otsuki K, Fujita T, et al. Effects of phosphorylation of immunomodulatory agent FTY720 (fingolimod) on antiproliferative activity against breast and colon cancer cells. *Biological and Pharmaceutical Bulletin*, 2008, 31(6): 1177-1181.
- [2] Deogracias R, Yazdani M, Dekkers M P J, et al. Fingolimod, a sphingosine-1 phosphate receptor modulator, increases BDNF levels and improves symptoms of a mouse model of Rett syndrome. *Proceedings of the National Academy of Sciences*, 2012, 109(35): 14230-14235.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



APEX BIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

