

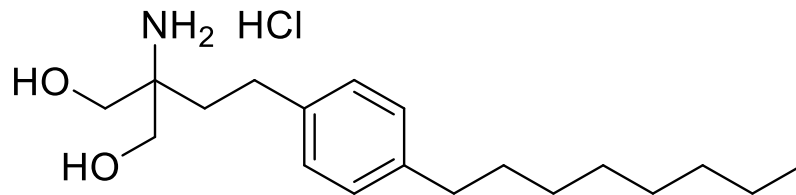
## FTY720

Catalog number: B-0720

Molecular Formula:  $C_{19}H_{33}NO_2 \times HCl$

MW: 343.93

CAS: 162359-56-0



Alternate Name: 2-Amino-2-(4-octylphenethyl)propane-1,3-diol hydrochloride

Solubility: Ethanol, DMSO, DMF – at least 20 mg/mL, ethanol:PBS (pH 7.2) 1:1 – 0.2 mg/mL

Storage and Handling: Store dry at  $-20^{\circ}C$ . Stock solutions can be prepared in organic solvent and flushed with inert gas. Aqueous solutions/suspensions should be stored at  $-20^{\circ}C$ .

Background: FTY720 is a structural analog of sphingosine as well as a substrate for sphingosine kinase. The phosphorylated FTY720 acts as a potent agonist at four of the sphingosine-1-phosphate (S1P) receptors (S1P<sub>1</sub>, S1P<sub>3</sub>, S1P<sub>4</sub>, and S1P<sub>5</sub>). FTY720 also enhances the activity of the sphingosine transporter Abcb1 and the leukotriene C<sub>4</sub> transporter Abcc1 and inhibits cytosolic phospholipase A<sub>2</sub> activity. It is a novel immune modulator that prolongs allograft transplant survival in numerous models by inhibiting lymphocyte emigration from lymphoid organs. Animal studies suggest that FTY720 can effectively treat several autoimmune diseases and a recently completed Phase II clinical trial highlighted FTY720 as a potential therapy for relapsing-remitting multiple sclerosis. The product is not sterile.

References: 1 Brinkmann, V., Pinschewer, D.D., Feng, L., et al. FTY720: Altered lymphocyte traffic results in allograft protection. *Transplantation* 72 764-769 (2001); 2 Brinkmann, V., Davis, M.D., Heise, C.E., et al. The immune modulator FTY720 targets sphingosine 1-phosphate receptors. *J Biol Chem* 277(24) 21453-21457 (2002); 3 Matloubian, M., Lo, C.G., Cinamon, G., et al. Lymphocyte egress from thymus and peripheral lymphoid organs is dependent on S1P receptor 1. *Nature* 427 355-360 (2004); 4 Honig, S.M., Fu, S., Mao, X., et al. FTY720 stimulates multidrug transporter- and cysteinyl leukotriene-dependent T cell chemotaxis to lymph nodes. *J Clin Invest* 111(5) 627-637 (2003); 5 Payne, S.G., Oskeritizian, C.A., Griffiths, R., et al. The immunosuppressant drug FTY720 inhibits cytosolic phospholipase A<sub>2</sub> independently of sphingosine-1-phosphate receptors. *Blood* 109(3) 1077-1085 (2007). 6 Baumruker T, Billich A, Brinkmann V. FTY720, an immunomodulatory sphingolipid mimetic: translation of a novel mechanism into clinical benefit in multiple sclerosis. *Expert Opin Investig Drugs* 16(3) 283-289 (2007).

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

