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Technical Data Sheet

For research use only Not intended or approved for diagnostic or therapeutic use.

Product Name: 2-Amino-2-(4-octylphenethyl)propane-1,3-diol hydrochloride Immunosuppressive Agent FTY720

Product Number: B-0720



Formula: C₁₉H₃₃NO₂ x HCl, Mol. Wt.: 343.93

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

Storage: store dry at -20° C. Stock solutions can be prepared in organic solvent and flushed with inert gas. Aqueous solutions should not be store longer than 1 day

Field of Interest: 2-Amino-2-(4-octylphenethyl)propane-1,3-diol hydrochloride (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 (S1P₁, S1P₃, S1P₄, and S1P₅). FTY720 also enhances the activity of the sphingosine transporter Abcb1 and the leukotriene C₄ transporter Abcc1 and inhibits cytosolic phospholipase A₂ 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.

Reference: 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 A₂ 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. 2-Amino-2-(4-octylphenethyl)propane-1,3-diol hydrochloride 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. Echelon Biosciences products are sold for research and development purposes only and are not for diagnostic use or to be incorporated into products for resale without written permission form Echelon Biosciences. Materials in this publication, as well as applications and methods and use, may be covered by one or more U.S. or foreign patents or patents pending. We welcome inquiries about licensing the use of our trademarks and technologies at busdev@echelon-inc.com.