

Product Specification Sheet

Product Name: NVP-AUY954

Catalog Number: C6295

Technical information:

Chemical Formula: $C_{25}H_{20}F_3NO_2S$

CAS #: 820240-77-5

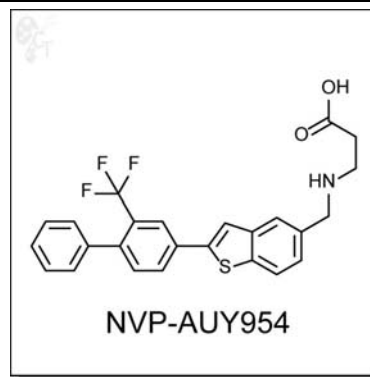
Molecular Weight: 455.12

Purity: > 99%

Appearance: White solid

Solubility: Soluble in DMSO up to 50 mM

Chemical Name: 3-[[2-[4-phenyl-3-(trifluoromethyl)phenyl]-1-benzothiophen-5-yl]methylamino]propanoic acid



Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

- Handling:**
- To make 10 mM stock solution, add 0.22mL of DMSO for each mg of NVP-AUY954.
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: NVP-AUY954 is an orally-available, benzothiazole-based, monoselective agonist of the sphingosine-1-phosphate receptor 1 (S1P1) intended for the treatment of human autoimmune mediated inflammatory neuropathies. Along with EC₅₀ potency of 1.2 nM, NVP-AUY954 has at least 280-fold selectivity for S1P1 compared to the receptor's four other subtypes. (1, 2)

NVP-AUY954 induces a potent and reversible reduction of circulating lymphocytes; in combination with Everolimus, NVP-AUY954 can prolong the survival of cardiac allografts in a rat transplantation model. NVP-AUY954 also has been shown to activate downstream kinase cascades, increasing Erk (Tyr204) and Akt (Ser473) phosphorylation at EC₅₀s of 0.1 and 1.0 nM, respectively. (2)

NVP-AUY954 efficacy has been correlated with an accumulation of plasmacytoid dendritic cells (pDC), which may have therapeutic value in the treatment of multiple sclerosis. (3)

- Reference:**
1. Zhang et al., AUY954, a selective S1P1 modulator, prevents experimental autoimmune neuritis. *J. Neuroimmunol.* 2009, 216, 59-65. Pubmed ID: 19804913
 2. Pan et al., A Monoselective Sphingosine-1-Phosphate Receptor-1 Agonist Prevents Allograft Rejection in a Stringent Rat Heart Transplantation Model. *Chem. Biol.* 2006, 13, 1227-1234. Pubmed ID: 17114004
 3. Galicia-Rosas et al., A Sphingosine-1-Phosphate Receptor 1-Directed Agonist Reduces Central Nervous System Inflammation in a Plasmacytoid Dendritic Cell-Dependent Manner. *J. Immunol.* 2012, 189, 3700-3706. Pubmed ID: 22933630

To reorder: <http://www.cellagentech.com/NVP-AUY954/>

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.