

Product Specification Sheet

Product Name: LY2811376

Catalog Number: C5281

Technical information:

Chemical Formula: C₁₅H₁₄F₂N₄S

CAS #: 1194044-20-6

Molecular Weight: 320.36

Purity: > 98%

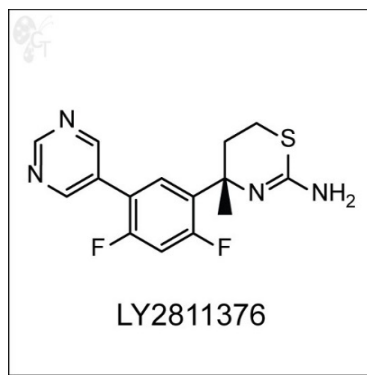
Appearance: White solid

Solubility: Soluble in DMSO up to 50 mM

Chemical Name: (S)-4-(2,4-difluoro-5-(pyrimidin-5-yl)phenyl)-4-methyl-5,6-dihydro-4H-1,3-thiazin-2-amine

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 0.312mL of DMSO for each mg of LY2811376
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: LY-2811376 is a orally-available, non-peptidic inhibitor of hBACE1 with an IC₅₀ of 239 nM. Selectivity of LY-2811376 for BACE1 over BACE2 was found to be 10-fold, and 50-fold or greater over related aspartyl proteases cathepsin D, pepsin, or renin. [1] In APP-overexpressing human embryonic kidney cell lines, LY-2811376 treatment decreased Ab secretion in a concentration-dependent fashion, with an EC₅₀ of ~300 nM. In primary neuronal cultures of PDAPP transgenic mouse, Ab secretion was measured at an EC₅₀ of ~100 nM.

In vivo, LY2811376 inhibits BACE1 activity by concomitantly reducing C99 and sAPP_β, the two primary APP cleavage products generated by BACE1.

Reference: 1. May et al., Robust central reduction of amyloid-β in humans with an orally available, non-peptidic β-secretase inhibitor. J. Neurosci., 2011, 31(46), 16507-16516. Pubmed ID: 22090477

To reorder: <http://www.cellagentech.com/LY2811376/>

For Technical Support: technical@cellagentech.com

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