γ-secretase Inhibitor LY411575

Chemical Name: (S)-2-((S)-2-(3,5-difluorophenyl)-2-hydroxyacetamido)-N-((S)-5-methyl-6-oxo-6,7-dihydro-5H-dibenzo[b,d]azepin-7-yl)propanamide

<table>
<thead>
<tr>
<th>Molecular Weight:</th>
<th>479.48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula:</td>
<td>C_{26}H_{23}F_{2}N_{3}O_{4}</td>
</tr>
<tr>
<td>Purity:</td>
<td>≥ 98%</td>
</tr>
<tr>
<td>CAS#:</td>
<td>209984-57-6</td>
</tr>
<tr>
<td>Solubility:</td>
<td>DMSO up to 100mM</td>
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| Storage           | Powder: 4°C 1 year  
                    | DMSO: 4°C 3 month  
                    | -20°C 1 year |

Biological Activity:

LY411575 is a highly potent, selective, and orally bioavailable inhibitor of gamma secretase with an IC_{50} of ~0.1 nM for APP23 and APP51/16 in primary neurons. It has been shown to promote goblet cell differentiation in mouse intestine. LY411575 has also been observed to promote neural differentiation of mouse embryonic stem (ES) cells. In recent studies, LY411575 increased hair cell number in organ of Corti explants. Systemic LY411575 administration increased hair cell number and promoted hearing recovery in a noise-damaged cochlea, but local LY411575 administration promoted hearing recovery through transdifferentiation of supporting cells into hair cells after noise-induced hearing loss in the mature cochlea.

How to Use:

**In vitro:** LY411575 was usually used at 10 µM final concentration in vitro and in cellular assays.

**In vivo:** LY411575 was orally dosed to mice at 10-50mg/kg once per day or intraperitoneally dosed to mice at 5 mg/kg once per day.

Reference:


Products are for research use only. Not for human use.