Proteins

Product Data Sheet



gamma-secretase modulator 5

Cat. No.: HY-150050 CAS No.: 1353570-53-2 Molecular Formula: $C_{22}H_{25}N_{7}OS$ Molecular Weight: 435.55

Target: Amyloid-β

Pathway: **Neuronal Signaling**

Please store the product under the recommended conditions in the Certificate of Storage:

Analysis.

BIOLOGICAL ACTIVITY

Description gamma-secretase modulator 5 (compound 22d) is a brain-penetrant gamma-secretase modulator (GSMs) that inhibits the production of the aggregated amyloid β -peptide A β 42 with an IC $_{50}$ value of 60 nM. gamma-secretase modulator 5 can be

used in the study of Alzheimer's disease^[1].

IC₅₀ & Target Αβ38 AB40 Αβ42

> 104 nM (IC₅₀) 305 nM (EC50) 60 nM (IC₅₀)

In Vitro $gamma-secretase\ modulator\ 5\ (compound\ 22d)\ (1-10\ \mu\text{M},\ 24\ h)\ does\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ of\ the\ APP751\ enzyme\ and\ not\ affect\ the\ function\ affect\ the\ affect\ the\ function\ affect\ the\ affect\$ inhibit Notching processing in H4 human neuroglioma cells over-expressing human APP751^[1].

gamma-secretase modulator 5 (compound 22d) acts on A β 38 with the EC $_{50}$ value of 305 nM and acts on A β 40 with the IC $_{50}$ value of 104 $nM^{[1]}$.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

The pharmacokinetic parameters of gamma-secretase modulator 5 (compound 22d) in male CD-1 mice $^{[1]}$.

Parameters	IV	PO
Dose (mg/kg)	1	5
C _{max} (ng/mL)	824	705
T _{max} (h)	0.083	0.25
t _{1/2} (h)	0.5	-
AUC _{last} (ng•h/mL)	443	1089
AUC _{inf} (ng•h/mL)	463	1243
Cl (mL/h/kg)	2159	-

Vss (mL/kg)	1413	-	
F (%)	100	53.7	
	ntly confirmed the accuracy o		for reference only.

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[1]. Kevin D Rynearson, et al. Design and synthesis of novel methoxypyridine-derived gamma-secretase modulators. Bioorg Med Chem. 2020 Nov 15;28(22):115734.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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