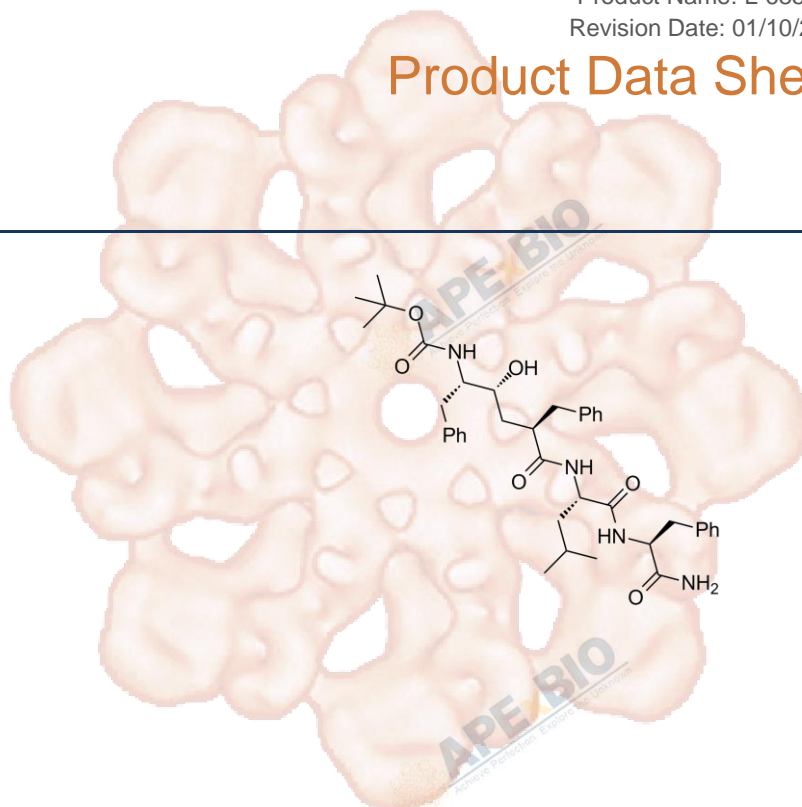


Product Data Sheet

L-685,458

Cat. No.:	A4404
CAS No.:	292632-98-5
Formula:	C39H52N4O6
M.Wt:	672.85
Synonyms:	
Target:	Proteases
Pathway:	Gamma Secretase
Storage:	Store at -20°C



Solvent & Solubility

≥33.65 mg/mL in DMSO; insoluble in H₂O; insoluble in EtOH

In Vitro

Preparing Stock Solutions	Mass			
	Solvent Concentration	1mg	5mg	10mg
	1 mM	1.4862 mL	7.4311 mL	14.8622 mL
	5 mM	0.2972 mL	1.4862 mL	2.9724 mL
	10 mM	0.1486 mL	0.7431 mL	1.4862 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

γ-secretase inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	HeLa and SiHa cells, SGHPL-5 cells
Preparation method:	The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	48 hours

	Applications:	In HeLa and SiHa cells, L-685,458 (8 μ M) blocked Notch activation. In L-685,458-treated cells, Hes1 nuclear translocation was largely blocked and about 6.63% of HeLa and 9.03% of SiHa cells were subjected to apoptosis. L-685,458 (10 μ M, 3 days) inhibited Notch pathways and caused accumulation of oocytes at the pachytene stages and decreased the number of oocytes that are able to reach diplotene. In SGHPL-5 cells, L-685,458 suppressed canonical notch activity. L-685,458 significantly increased the amount of BrdU-labeled primary CTB cells. L-685,458 increased migration of SGHPL-5 cells. L-685,458 (10 μ M, 48 hours) strongly increased motility of the nonproliferating EVT. L-685,458 (0.5 μ M) attenuated the isoflurane-induced increase in Tau-PS262 levels in WT mice and AD Tg mice primary neurons.
In Vivo	Animal experiment	
	Applications:	
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Zhang P, Li H, Yang B, et al. Biological significance and therapeutic implication of resveratrol-inhibited Wnt, Notch and STAT3 signaling in cervical cancer cells[J]. Genes & cancer, 2014, 5(5-6): 154.
- [2]. Feng Y M, Liang G J, Pan B, et al. Notch pathway regulates female germ cell meiosis progression and early oogenesis events in fetal mouse[J]. Cell Cycle, 2014, 13(5): 782-791.
- [3]. Haider S, Meinhardt G, Velicky P, et al. Notch signaling plays a critical role in motility and differentiation of human first-trimester cytotrophoblasts[J]. Endocrinology, 2014, 155(1): 263-274.
- [4]. Dong Y, Wu X, Xu Z, et al. Anesthetic isoflurane increases phosphorylated tau levels mediated by caspase activation and A β generation[J]. PloS one, 2012, 7(6): e39386.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage

temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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