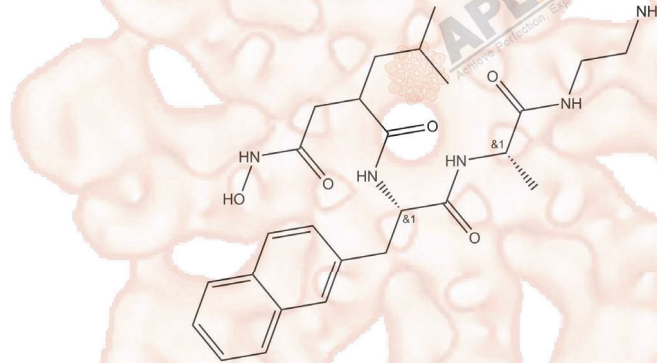


Product Data Sheet

TAPI-1

Cat. No.:	B4686
CAS No.:	171235-71-5
Formula:	C ₂₆ H ₃₇ N ₅ O ₅
M.Wt:	499.6
Synonyms:	
Target:	Proteases
Pathway:	MMP
Storage:	Store at -20°C



Solvent & Solubility

≥ 24.98mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent Concentration	Mass	1mg	5mg	10mg
	1 mM		2.0016 mL	10.0080 mL	20.0160 mL
	5 mM		0.4003 mL	2.0016 mL	4.0032 mL
	10 mM		0.2002 mL	1.0008 mL	2.0016 mL

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

Biological Activity

Shortsummary

TACE/ADAM17 inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	human pulmonary mucocypidermoid carcinoma cell line, NCI-H292 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:	30 min, 30 μM [1]
Applications:	TAPI-1, tumor necrosis factor α protease inhibitor-1, is an inhibitor of TACE

(TNF- α converting enzyme). TAPI-1 inhibits ectodomain shedding of TNF- α , L-selectin, and p55 TNF- α receptor. Pretreating cells with TAPI-1 inhibits PMA-induced EGFR phosphorylation. Besides, TAPI-1 could block TGF- α release and block the production of mucin induced by PMA, PA sup, and LPS [1]. TAPI-1 is also a general matrix metalloproteinase (MMP) and ADAM inhibitor [2].

In Vivo

Animal experiment

Applications:

Product Citations

1. Zhou J, Sun J, et al. "MicroRNA-145 overexpression attenuates apoptosis and increases matrixsynthesis in nucleus pulposus cells." Life Sci. 2019 Mar 15;221:274-283.PMID:30797016
2. Ellis-Connell AL, Balgeman AJ, et al. "ALT-803 transiently reduces SIV replication in the absence of antiretroviraltreatment." J Virol. 2017 Nov 8. pii: JVI.01748-17.PMID:29118125

See more customer validations on www.apexbt.com.

References

- [1]. Shao MX, Ueki IF, Nadel JA. Tumor necrosis factor alpha-converting enzyme mediates MUC5AC mucin expression in cultured human airway epithelial cells. Proc Natl Acad Sci U S A. 2003 Sep 30;100(20):11618-23.
- [2]. Chen CD, Podvin S, Gillespie E, Leeman SE, Abraham CR. Insulin stimulates the cleavage and release of the extracellular domain of Klotho by ADAM10 and ADAM17. Proc Natl Acad Sci U S A. 2007 Dec 11;104(50):19796-801.

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 APExBIO 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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