

Product Data Sheet

Bax inhibitor peptide V5

Cat. No.:	A4461
CAS No.:	579492-81-2
Formula:	C27H50N6O6S
M.Wt:	586.79
Synonyms:	
Target:	Apoptosis
Pathway:	Bcl-2 Family
Storage:	Desiccate at -20°C



Solvent & Solubility

≥29.35 mg/mL in DMSO; insoluble in EtOH; ≥91.4 mg/mL in H₂O

In Vitro	Preparing Stock Solutions	Mass			
		Solvent	1mg	5mg	10mg
		Concentration			
		1 mM	1.7042 mL	8.5209 mL	17.0419 mL
		5 mM	0.3408 mL	1.7042 mL	3.4084 mL
		10 mM	0.1704 mL	0.8521 mL	1.7042 mL

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary	Bax inhibitor	
IC ₅₀ & Target		
In Vitro	Cell Viability Assay	
	Cell Line:	Mouse islet isolation
	Preparation method:	The solubility of this compound in DMSO is >24.1mg/mL. 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:	0-100 μM, 24 h

	Applications:	Bax inhibitor peptide V5 (0-50 μM) reduced cell death in STF-cMyc cells but not in SW620 or NCI-H23 cells. BIP V5 does not result in any significant effect on cell cycle arrest at the G2/M phase. In mouse islet isolation, BIP V5 (100 μM) treatment upregulated expression of anti-apoptotic proteins Bcl-2 and XIAP by more than 3- and 11-fold and downregulated expression of apoptosis-inducing proteins Bax, Bad, and nuclear factor- κB -p65 by 10, 30, and nearly 50%, respectively.
In Vivo	Animal experiment	
	Animal models:	Streptozotocin-induced diabetic mice
	Dosage form:	100 $\mu\text{mol/l}$
	Applications:	Following transplantation in streptozotocin-induced diabetic mice, 150 BIP V5-treated islet equivalents functioned as well as 450 control untreated islet equivalents in normalizing blood glucose.
	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]. Jo M J, Paek A R, Choi J S, et al. Regulation of cancer cell death by a novel compound, C604, in a c-Myc-overexpressing cellular environment[J]. European journal of pharmacology, 2015, 769: 257-265.
- [2]. Sawada M, Hayes P, Matsuyama S. Cytoprotective membrane-permeable peptides designed from the Bax-binding domain of Ku70. Nat Cell Biol, 2003, 5(4): 352-357. [2].Rivas-Carrillo JD, Soto-Gutierrez A, Navarro-Alvarez N, et al. Cell-permeable pentapeptide V5 inhibits apoptosis and enhances insulin secretion, allowing experimental single-donor islet transplantation in mice. Diabetes, 2007, 56(5): 1259-1267.

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. Short-term 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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