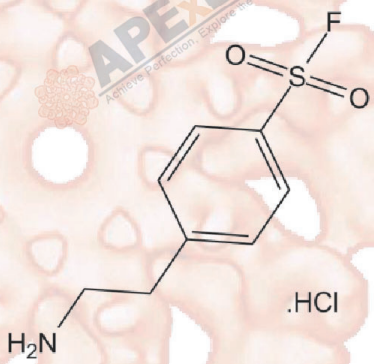
Product Data Sheet

AEBSF.HCl

Cat. No.:	A2573
CAS No.:	30827-99-7
Formula:	C8H10FNO2S·HCl
M.Wt:	239.69
Synonyms:	AEBSF.HCl,AEBSF Hydrochloride
Target:	Proteases
Pathway:	Serine Protease
Storage:	Desiccate at -20°C



Solvent & Solubility

In Vitro

≥12 mg/mL in DMSO, ≥15.73 mg/mL in H2O, ≥23.8 mg/mL in EtOH with gentle warming

Preparing Stock Solutions

Concentration \ Mass (Solvent)	1mg	5mg	10mg
1 mM	4.1721 mL	20.8603 mL	41.7206 mL
5 mM	0.8344 mL	4.1721 mL	8.3441 mL
10 mM	0.4172 mL	2.0860 mL	4.1721 mL

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

Biological Activity

Shortsummary	Serine protease inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	K695sw, HS695 and SKN695 cells
Preparation method:	The solubility of this compound in DMSO is ≥798.97mg/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, 0.1, 0.3, 0.6, 0.8, 1.0 and 1.2 mM; 20 mins
Applications:	AEBSF was found to inhibit Aβ production in various cell lines. In K293 cells

		transfected with βAPP695 (K695sw), AEBSF showed dose-dependent reduction of Aβ with the IC50 value of about 1 mM. In HS695 and SKN695 cells transfected with wild-type APP695, AEBSF showed inhibition effect with IC50 value of about 300 μM. AEBSF was also found to increase α-cleavege and inhibit β- cleavage.
In Vivo	**Animal experiment**	
	Animal models:	SD rats
	Dosage form:	Intrauterine (5 mg or 10 mg AEBSF per injection) or tail vein (10 mg AEBSF per rat) administration on day 3 of pregnancy
	Applications:	According to the number of visible implanted embryos on day 8 of pregnancy, it was shown that AEBSF inhibited embryo implantation in rat.
	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

1. Brodie NI, Popov KI, et al."Conformational ensemble of native α-synuclein in solution as determined by short-distance crosslinking constraint-guided discrete molecular dynamics simulations." PLoS Comput Biol. 2019 Mar 27;15(3):e1006859.PMID:30917118

See more customer validations on www.apexbt.com.

References

[1]. Citron M, Diehl T S, Capell A, et al. Inhibition of amyloid β-protein production in neural cells by the serine protease inhibitor AEBSF. Neuron, 1996, 17(1): 171-179.

[2]. Jiang YH, Shi Y, He YP, Du J, Li RS, Shi HJ, Sun ZG, Wang J. Serine protease inhibitor 4-(2-aminoethyl)benzenesulfonyl fluoride hydrochloride (AEBSF) inhibits the rat embryo implantation in vivo and interferes with cell adhesion in vitro. Contraception. 2011 Dec;84(6):642-8.

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.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com