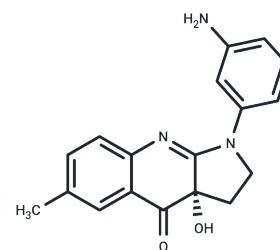


(S)-3'-amino Blebbistatin

Chemical Properties

CAS No. :	2097141-18-7
Formula:	C ₁₈ H ₁₇ N ₃ O ₂
Molecular Weight:	307.35
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	"(S)-3'-amino Blebbistatin, retaining the active stereochemistry of the less stable and more phototoxic (-)-blebbistatin, serves as a refined selective cell-permeable inhibitor of non-muscle myosin II ATPases. This compound efficaciously inhibits the Mg-ATPase activity and in vitro motility of non-muscle myosin IIA and IIB across several species with IC50s ranging from 0.5-5 μM, and exhibits minimal inhibition against smooth muscle myosin (IC50= 80 μM). Its primary functions include obstructing apoptosis-related bleb formation, directed cell migration, and cytokinesis in vertebrate cells. (S)-3'-amino Blebbistatin overcomes (-)-blebbistatin's limitation of rapid degradation under blue light (450-490 nm) exposure, which generates cytotoxic intermediates, thus posing a challenge for fluorescent live cell imaging applications. The introduction of a 3'-amino group to its structure notably reduces fluorescence while maintaining (-)-blebbistatin's activity, making it a superior alternative for research purposes."
Targets(IC50)	Others, Myosin

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2536 mL	16.2681 mL	32.5362 mL
5 mM	0.6507 mL	3.2536 mL	6.5072 mL
10 mM	0.3254 mL	1.6268 mL	3.2536 mL
50 mM	0.0651 mL	0.3254 mL	0.6507 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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