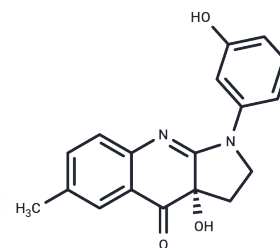


## (S)-3'-hydroxy Blebbistatin

## Chemical Properties

CAS No. :	2097136-42-8
Formula:	C <sub>18</sub> H <sub>16</sub> N <sub>2</sub> O <sub>3</sub>
Molecular Weight:	308.33
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'-hydroxy-Blebbistatin is a more stable and less phototoxic derivative of (-)-blebbistatin, retaining the latter's properties as a selective, cell-permeable inhibitor of non-muscle myosin II ATPases. Unlike its predecessor, (S)-3'-hydroxy-Blebbistatin exhibits reduced fluorescence, improving its utility in live cell imaging applications by diminishing degradation into cytotoxic intermediates under blue light exposure (450-490 nm). It effectively inhibits the Mg-ATPase activity and in vitro motility of non-muscle myosin IIA and IIB across various species with IC <sub>50</sub> values ranging from 0.5-5 μM and shows minimal inhibition against smooth muscle myosin with an IC <sub>50</sub> of 80 μM. This compound plays a critical role in preventing apoptosis-related bleb formation, directed cell migration, and cytokinesis in vertebrate cells, mirroring the active (-)-blebbistatin enantiomer in mechanism and efficacy.
Targets(IC <sub>50</sub> )	Others, Myosin

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2433 mL	16.2164 mL	32.4328 mL
5 mM	0.6487 mL	3.2433 mL	6.4866 mL
10 mM	0.3243 mL	1.6216 mL	3.2433 mL
50 mM	0.0649 mL	0.3243 mL	0.6487 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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