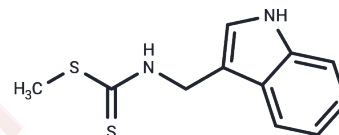


Brassinin

Chemical Properties

CAS No. :	105748-59-2
Formula:	C ₁₁ H ₁₂ N ₂ S ₂
Molecular Weight:	236.36
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	Brassinin (BSN) (BSN) is a phytoalexin isolated from <i>B. campestris</i> that exhibits anticancer, chemopreventative, antiproliferative, and antifungal activities.
Targets(IC50)	Endogenous Metabolite,Antifungal
In vitro	In lung cancer cells, brassinin inhibits constitutive and IL-6-inducible STAT3 signaling through modulation of PIAS-3 and SOCS-3.It appears that brassinin induces apoptosis in PC-3 prostate cancer cells via the suppression of PI3K/Akt/mTOR/S6K1 signaling.
In vivo	Brassinin attenuates tumor growth in a xenograft lung cancer mouse model through modulation of E3 SUMO-protein ligase 3 (PIAS-3) and suppressor of cytokine signaling-3 (SOCS-3).

Solubility Information

Solubility	DMSO: 83.33 mg/mL (352.56 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.2308 mL	21.1542 mL	42.3083 mL
5 mM	0.8462 mL	4.2308 mL	8.4617 mL
10 mM	0.4231 mL	2.1154 mL	4.2308 mL
50 mM	0.0846 mL	0.4231 mL	0.8462 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.

Reference

Kim SM,etal.Brassinin induces apoptosis in PC-3 human prostate cancer cells through the suppression of PI3K/Akt/mTOR/S6K1 signaling cascades.Phytother Res. 2014 Mar;28(3):423-31.

Pedras MS,etal.Phytoalexins from the crucifer rutabaga: structures, syntheses, biosyntheses, and antifungal activity.J Org Chem. 2004 Jun 25;69(13):4471-6.

Lee JH,et al.Brassinin inhibits STAT3 signaling pathway through modulation of PIAS-3 and SOCS-3 expression and sensitizes human lung cancer xenograft in nude mice to paclitaxel.Oncotarget. 2015 Mar 20;6(8):6386-405.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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