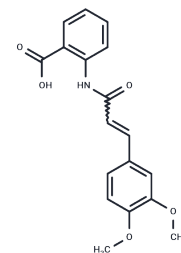


Tranilast

Chemical Properties

CAS No. :	53902-12-8
Formula:	C ₁₈ H ₁₇ NO ₅
Molecular Weight:	327.33
Appearance:	no data available
Storage:	keep away from direct sunlight,store under nitrogen Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Tranilast (SB 252218), an antiallergic drug, suppresses lipid mediator and cytokine release from inflammatory cells, therefore utilized in the treatment of allergic disorders.
Targets(IC50)	RAAS,Prostaglandin Receptor
In vitro	In diabetic rats' hearts, Tranilast reduces the phosphorylation of Smad2, effectively mitigating cardiac fibrosis.
In vivo	In hypertrophic and proliferative scar tissues, Tranilast ([3-300 mM]) inhibits collagen synthesis in fibroblasts by suppressing the Transforming Growth Factor (TGF)-β1, yet it does not inhibit the fibroblasts in normal skin.
Kinase Assay	His-tagged human Mps1Cat encoding amino acids 510-857 is generated. For kinase assays, 500 ng is added to buffer (25 mM Tris-HCl, pH 7.4, 100 mM NaCl, 50 µg/mL BSA, 0.1 mM EGTA, 0.1% β-mercaptoethanol, 10 mM MgCl ₂ , and 0.5 µg/mL myelin basic protein), AZ3146, and 100 µM γ-[³² P]ATP (2 µCi/assay). Reactions are incubated at 30°C for 20 min, spotted onto P81 paper, washed in 0.5% phosphoric acid, and immersed in acetone. Phosphate incorporation is determined by scintillation counting. For immunoprecipitation kinase assays, HeLa cells are treated with nocodazole for 14 h, mitotic cells isolated, washed in PBS, and lysed for 30 min in 50 mM Tris-HCl, pH 7.4, 100 mM NaCl, 0.5% NP-40, 5 mM EDTA, 5 mM EGTA, 40 mM β-glycerophosphate, 0.2 mM PMSF, 1 mM DTT, 1 mM sodium orthovanadate, 20 mM sodium fluoride, 1 µM okadaic acid, and complete EDTA-free protease inhibitor cocktail. Full-length Mps1 is immunoprecipitated. Purified complexes are washed with lysis buffer containing 100 mM NaCl and assayed as described for the recombinant protein. To quantify ³² P incorporation, reactions are stopped with SDS sample buffer and separated by SDS-PAGE followed by phosphorimaging. The plate is analyzed using a phosphorimager using AIDA software. To assess the specificity of AZ3146, a single-point screen is carried using kinase profiling service. 50 kinases are selected and assayed with 1 µM AZ3146[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (152.75 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	3.055 mL	15.2751 mL	30.5502 mL
5 mM	0.611 mL	3.055 mL	6.110 mL
10 mM	0.3055 mL	1.5275 mL	3.055 mL
50 mM	0.0611 mL	0.3055 mL	0.611 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.

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