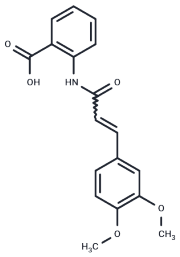
# Data Sheet (Cat.No.T2690)

TargetMol

## Tranilast

### Chemical Properties



CAS No. : 53902-12-8

Formula: C18H17NO5

Molecular Weight: 327.33

Storage: Keep away from direct sunlight,Store under nitrogen
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

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|---|---|
| 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 MgCl2, and 0.5 μg/mL myelin basic protein), AZ3146, and 100 μM γ-[32P]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 32P 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

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| Solubility | DMSO: 250 mg/mL (763.76 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.11 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

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.

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

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