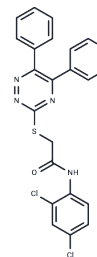


Z-3578

Chemical Properties

CAS No. : 473687-20-6
 Formula: C₂₃H₁₆Cl₂N₄O₅
 Molecular Weight: 467.37
 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	Z-3578 is a small molecule antagonist targeting the MrgX2 (Mas-related G protein-coupled receptor X2) with notable anti-pseudoallergic properties, exhibiting a KD value of 729 nM. It effectively inhibits mast cell degranulation induced by substance P (SP) and C48/80, with IC ₅₀ values of 4.90 μM and 6.18 μM, respectively, suppresses the release of β-hexosaminidase, and significantly reduces the release of histamine and TNF-α, as well as intracellular calcium flux. Additionally, in a mouse pseudoallergy model, Z-3578 significantly alleviates foot swelling, dye leakage, and reduces serum histamine levels, indicating a strong in vivo anti-allergic effect. Z-3578 presents as a promising lead compound in the field of anti-allergic treatments, particularly for pseudoallergic reactions.
Targets(IC ₅₀)	MRGPR, TNF

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1396 mL	10.6982 mL	21.3963 mL
5 mM	0.4279 mL	2.1396 mL	4.2793 mL
10 mM	0.214 mL	1.0698 mL	2.1396 mL
50 mM	0.0428 mL	0.214 mL	0.4279 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

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481