

SPA0355

Chemical Properties

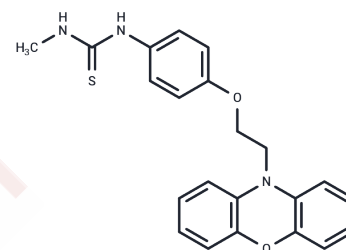
CAS No. : 1251839-15-2

Formula: C₂₂H₂₁N₃O₂S

Molecular Weight: 391.486

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	SPA0355 is a thiourea derivative with antioxidant and anti-inflammatory properties. It inhibits RANKL (receptor activator of nuclear factor κB ligand)-induced osteoclastogenesis in primary bone marrow-derived macrophages and suppresses the activation of MAPKs, Akt, and NF-κB pathways. Furthermore, SPA0355 enhances osteoblast differentiation by increasing alkaline phosphatase activity and mineralized nodule formation. It protects ovariectomized mice from bone loss by stimulating osteoblast differentiation and inhibiting osteoclast resorption, making it a potential candidate for studying postmenopausal osteoporosis.
Targets(IC50)	NF-κB,Akt,RANKL/RANK,p38 MAPK

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5543 mL	12.7717 mL	25.5434 mL
5 mM	0.5109 mL	2.5543 mL	5.1087 mL
10 mM	0.2554 mL	1.2772 mL	2.5543 mL
50 mM	0.0511 mL	0.2554 mL	0.5109 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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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481