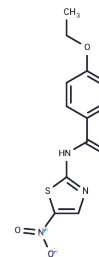


MID-1

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 312608-54-1 |
| Formula: | C ₁₂ H ₁₁ N ₃ O ₄ S |
| Molecular Weight: | 293.3 |
| 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 | MID-1 is an inhibitor of MG53-IRS-1 (Mitsugumin 53-Insulin Receptor Substrate-1) interaction. It disrupts molecular association of MG53 with IRS-1 and abolishes MG53-induced IRS-1 ubiquitination and degradation in skeletal muscle, leading to elevated IRS-1 expression level and increased insulin signaling and glucose uptake |
| Targets(IC50) | IGF-1R |

Solubility Information

| | |
|------------|---|
| Solubility | DMSO: 4.5 mg/mL (15.34 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 3.4095 mL | 17.0474 mL | 34.0948 mL |
| 5 mM | 0.6819 mL | 3.4095 mL | 6.819 mL |
| 10 mM | 0.3409 mL | 1.7047 mL | 3.4095 mL |
| 50 mM | 0.0682 mL | 0.3409 mL | 0.6819 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

Lee H, et, al. MG53-IRS-1 (Mitsugumin 53-Insulin Receptor Substrate-1) Interaction Disruptor Sensitizes Insulin Signaling in Skeletal Muscle. J Biol Chem. 2016 Dec 23;291(52):26627-26635.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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