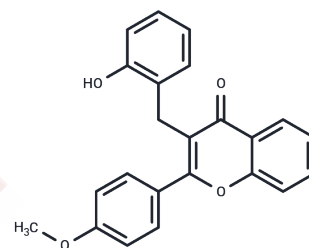


## FGFR1 inhibitor-11

## Chemical Properties

CAS No. :	2157482-40-9
Formula:	C <sub>23</sub> H <sub>18</sub> O <sub>4</sub>
Molecular Weight:	358.39
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	FGFR1 inhibitor-11 (compound 5g) effectively targets and binds to FGFR1, subsequently inhibiting the downstream signaling pathways ERK1/2 and IκBα/NF-κB, which results in the suppression of RANKL-induced osteoclastogenesis. This compound also exhibits oral bioactivity [1].
Targets(IC50)	FGFR
In vitro	FGFR1 inhibitor-11 (compound 5g): In a Cell Viability Assay with BMDMs, at concentrations of 0, 1.25 μM, 2.5 μM, 5 μM, 10 μM, 20 μM, 40 μM, 80 μM, and 160 μM, and an incubation time of 48 hours, it exhibited toxicity above 40 μM. In Immunofluorescence with osteoclasts, at concentrations of 0, 2.5 μM, 5 μM, and 10 μM, it significantly and dose-dependently increased the protein level of F-actin. In Real Time qPCR with BMDMs at a 10 μM concentration over 1, 2, and 3 days, it inhibited the mRNA expression levels of the primary osteoclast-specific marker genes (Ctsk, Mmp9, and others).
In vivo	FGFR1 inhibitor-11 (15-30 mg/kg; oral administration; twice daily) significantly prevents bone loss (BV, T-BMD, etc.) in mice [1].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7903 mL	13.9513 mL	27.9026 mL
5 mM	0.5581 mL	2.7903 mL	5.5805 mL
10 mM	0.279 mL	1.3951 mL	2.7903 mL
50 mM	0.0558 mL	0.279 mL	0.5581 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

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