

ROR1-IN-4

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

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	ROR1-IN-4 is a selective inhibitor of ROR1 with a dissociation constant (Kd) of 52 nM. It exhibits potent antiproliferative activity in the triple-negative breast cancer (TNBC) cell line MDA-MB-231, with an IC50 of 75 nM. ROR1-IN-4 reduces colony formation, induces apoptosis (apoptosis), and inhibits phosphorylation of ROR1(Tyr786) in these cells. Additionally, ROR1-IN-4 demonstrates significant antitumor efficacy in nude mice bearing subcutaneous MDA-MB-231 xenograft tumors. This compound is applicable for research related to TNBC.
Targets(IC50)	Apoptosis,Bcl-2 Family,PARP,ROR
In vitro	ROR1-IN-4 (Compound 59) exhibits potent antiproliferative activity in triple-negative breast cancer (TNBC) cell line MDA-MB-231, with an IC50 of 0.075 μ M, whereas it shows no significant antiproliferative effect in non-TNBC cell lines MCF-7 (IC50 > 10 μ M) and HEK-293T (IC50 = 9.72 μ M). Additionally, ROR1-IN-4 (0.1-3 μ M, 48 h) induces apoptosis and suppresses the phosphorylation of ROR1 (Tyr786) in MDA-MB-231 cells. Furthermore, ROR1-IN-4 (0.1-1 μ M, 14 days) reduces colony formation in MDA-MB-231 cells.
In vivo	Compound ROR1-IN-4 (Compound 59), administered intraperitoneally at doses of 10-20 mg/kg every other day for 30 days, demonstrates excellent antitumor activity in nude mice with MDA-MB-231 subcutaneous xenograft tumors. Additionally, ROR1-IN-4 at 10 mg/kg, delivered intraperitoneally every other day for 45 days, exhibits strong inhibition of tumor growth and metastasis in nude mice with MDA-MB-231-Luc orthotopic breast xenograft tumors.

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