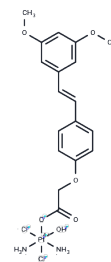


STAT3-IN-18

Chemical Properties

CAS No. :	2668267-41-0
Formula:	C ₁₈ H ₂₄ Cl ₂ N ₂ O ₆ Pt
Molecular Weight:	630.38
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	STAT3-IN-18 (compound SPP), a platinum (IV) complex featuring an axial ligand from sandalwood, suppresses the JAK2-STAT3 pathway in breast cancer (BC) cells and exhibits anti-proliferative properties. It promotes apoptosis by activating caspase-3 and elevating levels of cleaved polyADP-ribose polymerase, in addition to enhancing maturation and antigen presentation in dendritic cells. Moreover, STAT3-IN-18 has demonstrated in vivo safety.
Targets(IC50)	Apoptosis,STAT,COX,JAK
In vitro	STAT3-IN-18 at a concentration of 0.5 μM for 48 hours inhibits the phosphorylation of STAT3 and JAK2 in MDA-MB-231 cells, reduces the protein levels of Bcl-2 and COX-2, and increases the protein levels of Bak, Caspase-3, and Cleaved-PARP1 [1]. Additionally, STAT3-IN-18 at 0.5 μM for 36 hours induces cell cycle arrest at the S phase and promotes apoptosis in MDA-MB-231 cells after 48 hours of treatment.
In vivo	STAT3-IN-18, administered bi-daily at an equivalent dose of 1.5 mg Pt for a total of 18 days, inhibited STAT3 phosphorylation and suppressed tumor growth in the 4T1 xenograft mouse model. The median lethal dose (LD50) of STAT3-IN-18 was determined to be 10.45 mg/kg [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5863 mL	7.9317 mL	15.8634 mL
5 mM	0.3173 mL	1.5863 mL	3.1727 mL
10 mM	0.1586 mL	0.7932 mL	1.5863 mL
50 mM	0.0317 mL	0.1586 mL	0.3173 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