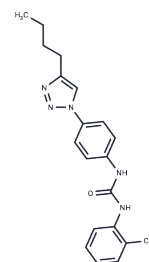


DDX3-IN-2

Chemical Properties

CAS No. :	1919828-81-1
Formula:	C ₂₀ H ₂₃ N ₅ O
Molecular Weight:	349.43
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	DDX3-IN-2, a potent inhibitor of DEADbox polypeptide 3 (DDX3), demonstrates remarkable activity against the target with an IC ₅₀ value of 0.3 μ M. Notably, this compound exhibits a wide range of antiviral effects, showcasing its efficacy against various viral strains. Importantly, DDX3-IN-2 exhibits the potential to overcome resistance observed in the context of HIV [1].
In vitro	DDX3-IN-2 acts as a competitive inhibitor in relation to the RNA substrate, evidenced by its diminishing inhibitory effectiveness in response to heightened RNA substrate levels. Furthermore, DDX3-IN-2 exhibits no inhibitory activity against the ATPase function of DDX3, DDX1 helicase, or DENV NS3 helicase [1].
In vivo	DDX3-IN-2 administered via tail vein injection at a dose of 20 mg/kg demonstrates remarkable biocompatibility, with Wistar rats exhibiting excellent tolerance to this dosage. Additionally, when administered as an intravenous (i.v.) bolus injection at 10 mg/kg over a period of 0~25 hours, DDX3-IN-2 significantly enhances pharmacokinetic properties by swiftly reducing both the half-life and plasma clearance values, showcasing its potential for efficient drug elimination [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8618 mL	14.309 mL	28.618 mL
5 mM	0.5724 mL	2.8618 mL	5.7236 mL
10 mM	0.2862 mL	1.4309 mL	2.8618 mL
50 mM	0.0572 mL	0.2862 mL	0.5724 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.

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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