Product Data Sheet

Product Name: JLJ648
Cat. No.: GC78898

Chemical Properties

Cas. No.

Formula	$C_{23}H_{17}N_3O_3S$	M.Wt	415.46
Solubility		Storage	Store at -20°C

General tips: For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.

Shipping Condition: Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

JLJ648 is a Gag-Pol dimerizer with antiviral activity. JLJ648 can inhibit HIV replication and induce infected cell pyroptosis. JLJ648 can be used for the research of infection, such as HIV (human immunodeficiency virus) [1].

In Vitro, JLJ648 (3 days) inhibits HIV-1 replication in MT-2 cells with an EC50 of 1.6 nM [1]. JLJ648 shows low cytotoxicity in MT-2 and THP-1 cells (CC50>100 μM) and a CC50 of 22.9 μM in primary

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CD4+ T cells[1]. JLJ648 (17 h) promotes the homodimerization of recombinant HIV-1 RT p66 subunit with an EC50 of 95 nM[1]. JLJ648 (3-4 h) induces HIV protease-dependent pyroptosis in THP-1 clone14 cells and HIV-infected primary CD4+ T cells, with an EC50 of 86 nM[1]. JLJ648 (50 μM, 12 h) binds to HIV-1 RT p66 to form two oligomeric structures, subunits in catalytic/structural conformations and "infinity knot"-shaped homotetramer[1].

References:

[1]. Hollander K, et al. Mechanistic basis for a novel dual-function Gag-Pol dimerizer potentiating CARD8 inflammasome activation and clearance of HIV-infected cells. NPJ Drug Discov. 2025;2(1):22.

Caution: Product has not been fully validated for medical applications. For research use only.

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