

Product data sheet



MedKoo Cat#: 529117 Name: INX 08189 CAS: 1234490-83-5 Chemical Formula: C ₃₀ H ₃₉ N ₆ O ₉ P Exact Mass: 658.2516 Molecular Weight: 658.6488		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

INX 08189, also known as BMS 986094, is an RNA-directed RNA polymerase (NS5B) inhibitor potentially for the treatment of HCV infection.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	157.93	239.78
Ethanol	65.86	99.99

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.52 mL	7.59 mL	15.18 mL
5 mM	0.30 mL	1.52 mL	3.04 mL
10 mM	0.15 mL	0.76 mL	1.52 mL
50 mM	0.03 mL	0.15 mL	0.30 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Feng JY, Xu Y, Barauskas O, Perry JK, Ahmadyar S, Stepan G, Yu H, Babusis D, Park Y, McCutcheon K, Perron M, Schultz BE, Sakowicz R, Ray AS. Role of Mitochondrial RNA Polymerase in the Toxicity of Nucleotide Inhibitors of Hepatitis C Virus. Antimicrob Agents Chemother. 2015 Nov 23;60(2):806-17. doi: 10.1128/AAC.01922-15. PMID: 26596942; PMCID: PMC4750701.

In vivo study

1. Vernachio JH, Bleiman B, Bryant KD, Chamberlain S, Hunley D, Hutchins J, Ames B, Gorovits E, Ganguly B, Hall A, Kolykhalov A, Liu Y, Muhammad J, Raja N, Walters CR, Wang J, Williams K, Patti JM, Henson G, Madela K, Aljarah M, Gilles A, McGuigan C. INX-08189, a phosphoramidate prodrug of 6-O-methyl-2'-C-methyl guanosine, is a potent inhibitor of hepatitis C virus replication with excellent pharmacokinetic and pharmacodynamic properties. Antimicrob Agents Chemother. 2011 May;55(5):1843-51. doi: 10.1128/AAC.01335-10. Epub 2011 Feb 28. PMID: 21357300; PMCID: PMC3088254.

7. Bioactivity

Biological target:

BMS-986094 (INX-08189) is a potent inhibitor of hepatitis C virus (HCV) replication, with an EC₅₀ of 35 nM at 24 h in Huh-7 cells. BMS-986094 is a phosphoramidate prodrug of 6-O-methyl-2'-C-methyl guanosine. BMS-986094 can be used for the research of chronic HCV infection.

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In vitro activity

BMS-986094 showed marked cytotoxicity in all human cell lines and primary cells tested. After 5-day treatments with BMS-986094, cardiomyocytes showed the most profound sensitivity to cytotoxicity among the primary cells tested, with a CC_{50} of $0.68 \pm 0.32 \mu M$ (mean \pm standard deviation), almost equivalent to that of puromycin (CC_{50} of $0.33 \pm 0.05 \mu M$).

Reference: Antimicrob Agents Chemother. 2015 Nov 23;60(2):806-17. <https://pubmed.ncbi.nlm.nih.gov/26596942/>

In vivo activity

These data suggest that INX-08189 is efficiently extracted from the portal circulation by the monkey liver following oral administration, which results in the formation of the active HCV polymerase inhibitor 2'-C-MeGTP in liver tissue.

Reference: Antimicrob Agents Chemother. 2011 May;55(5):1843-51. <https://pubmed.ncbi.nlm.nih.gov/21357300/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.