Product data sheet



MedKoo Cat#: 525887 Name: NB-64 CAS: 53242-68-5		
Chemical Formula: C ₁₁ H ₈ ClNO ₂		OH
Exact Mass: 221.0244		
Molecular Weight: 221.64		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	J 01
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.	
	In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

NB-64 is a novel human immunodeficiency virus type 1 (HIV-1) entry inhibitor, interferring with the gp41 six-helix bundle formation and blocking virus fusion.

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
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	4.51 mL	22.56 mL	45.12 mL
5 mM	0.90 mL	4.51 mL	9.02 mL
10 mM	0.45 mL	2.26 mL	4.51 mL
50 mM	0.09 mL	0.45 mL	0.90 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

Jiang S, Lu H, Liu S, Zhao Q, He Y, Debnath AK. N-substituted pyrrole derivatives as novel human immunodeficiency virus type 1 entry inhibitors that interfere with the gp41 six-helix bundle formation and block virus fusion. Antimicrob Agents Chemother. 2004 Nov;48(11):4349-59. doi: 10.1128/AAC.48.11.4349-4359.2004. PMID: 15504864; PMCID: PMC525433.

In vivo study

TBD

7. Bioactivity

Biological target:

NB-64 is a novel human immunodeficiency virus type 1 (HIV-1) entry inhibitor, interferring with the gp41 six-helix bundle formation and blocking virus fusion.

In vitro activity

This study found that at this concentration two compounds, NB-2 and NB-64, significantly inhibited HIV-1 mediated syncytium formation and the six-helix bundle formation between the gp41 N peptide N36 and the C peptide C34. Both NB-2 and NB-64 are N-substituted pyrrole derivatives with molecular masses of 231 and 222 Da, respectively, and ClogP (a measure of partition of a drug in water and octanol phase) of 4.28 and 3.15, respectively (Fig. 1).

Product data sheet



Reference: Antimicrob Agents Chemother. 2004 Nov;48(11):4349-59. https://pubmed.ncbi.nlm.nih.gov/15504864/

In vivo activity

TBD

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.