

Product data sheet



MedKoo Cat#: 326803 Name: Pirodavir CAS: 124436-59-5 Chemical Formula: C ₂₁ H ₂₇ N ₃ O ₃ Exact Mass: 369.2052 Molecular Weight: 369.465	
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:

Pirodavir, also known as R 77975, is a capsid-binding anticoronavirus agent with potent in vitro activity against both group A and group B rhinovirus serotypes. Pirodavir was one of the most promising capsid-binding compounds to show efficacy in human clinical trials for chemoprophylaxis of the common cold.

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
DMF	30.0	81.20
DMF:PBS (pH 7.2) (1:3)	0.25	0.68
DMSO	10.0	27.07

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.71 mL	13.53 mL	27.07 mL
5 mM	0.54 mL	2.71 mL	5.41 mL
10 mM	0.27 mL	1.35 mL	2.71 mL
50 mM	0.05 mL	0.27 mL	0.54 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. Smee DF, Evans WJ, Nicolaou KC, Tarbet EB, Day CW. Susceptibilities of enterovirus D68, enterovirus 71, and rhinovirus 87 strains to various antiviral compounds. *Antiviral Res.* 2016 Jul;131:61-5. doi: 10.1016/j.antiviral.2016.04.003. Epub 2016 Apr 7. PMID: 27063860; PMCID: PMC5100981.

2. Andries K, Dewindt B, Snoeks J, Willebrords R, van Eemeren K, Stokbroekx R, Janssen PA. In vitro activity of pirodavir (R 77975), a substituted phenoxy-pyridazinamine with broad-spectrum anticoronaviral activity. *Antimicrob Agents Chemother.* 1992 Jan;36(1):100-7. doi: 10.1128/AAC.36.1.100. PMID: 1317142; PMCID: PMC189235.

In vivo study

TBD

7. Bioactivity

Biological target:

Pirodavir is a potent, broad-spectrum picornavirus inhibitor.

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In vitro activity

Pirodavisir (R 77975) is the prototype of a novel class of broad-spectrum antipicornavirus compounds. Although its predecessor, R 61837, a substituted phenyl-pyridazinamine, was effective in inhibiting 80% of 100 serotypes tested (EC80) at concentrations above 32 micrograms/ml, pirodavisir inhibits the same percentage of viruses at 0.064 micrograms/ml. Whereas R 61837 was active almost exclusively against rhinovirus serotypes of antiviral group B, pirodavisir is broad spectrum in that it is highly active against both group A and group B rhinovirus serotypes. Pirodavisir is also effective in inhibiting 16 enteroviruses, with an EC80 of 1.3 micrograms/ml. Pirodavisir acts at an early stage of the viral replication cycle (up to 40 min after infection) and reduces the yield of selected rhinoviruses 1,000- to 100,000-fold in a single round of replication.

Reference: Antimicrob Agents Chemother. 1992 Jan;36(1):100-7. <https://pubmed.ncbi.nlm.nih.gov/1317142/>

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.