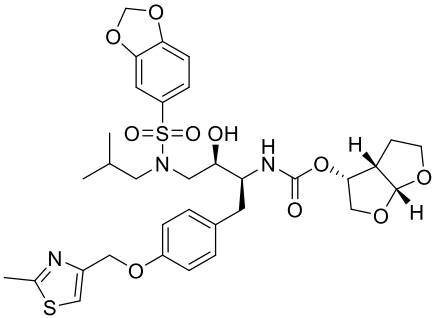


# Product data sheet



MedKoo Cat#: 524534 Name: Brecanavir CAS#: 313682-08-5 Chemical Formula: C <sub>33</sub> H <sub>41</sub> N <sub>3</sub> O <sub>10</sub> S <sub>2</sub> Exact Mass: 703.22334 Molecular Weight: 703.82	
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:

Brecanavir is a tyrosyl-based arylsulfonamide, high-affinity, protease inhibitor (PI) for the treatment of human immunodeficiency virus type-1. This compound potently inhibited HIV-1 in cell culture assays with 50% effective concentrations (EC(50)s) of 0.2 to 0.53 nM and was equally active against HIV strains utilizing either the CXCR4 or CCR5 coreceptor, as was found with other PIs. Brecanavir had a <5-fold increase in EC(50)s against 80% of patient isolates tested and had a greater mean in vitro potency than amprenavir, indinavir, lopinavir, atazanavir, tipranavir, and darunavir. Brecanavir is by a substantial margin the most potent and broadly active antiviral agent among the PIs tested in vitro.

## 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
N/A	N/A	N/A

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.42 mL	7.10 mL	14.21 mL
5 mM	0.28 mL	1.42 mL	2.84 mL
10 mM	0.14 mL	0.71 mL	1.42 mL
50 mM	0.03 mL	0.14 mL	0.28 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. Hazen R, Harvey R, Ferris R, Craig C, Yates P, Griffin P, Miller J, Kaldor I, Ray J, Samano V, Furfine E, Spaltenstein A, Hale M, Tung R, St Clair M, Hanlon M, Boone L. In vitro antiviral activity of the novel, tyrosyl-based human immunodeficiency virus (HIV) type 1 protease inhibitor brecanavir (GW640385) in combination with other antiretrovirals and against a panel of protease inhibitor-resistant HIV. *Antimicrob Agents Chemother.* 2007 Sep;51(9):3147-54. doi: 10.1128/AAC.00401-07. Epub 2007 Jul 9. PMID: 17620375; PMCID: PMC2043237.

In vivo study

N/A

## 7. Bioactivity

Biological target:

Brecanavir (GW640385) is a novel, potent HIV protease inhibitor.

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## In vitro activity

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BCV (brecanavir) inhibited HIV-1 strain IIIB and the strain Ba-L, with subnanomolar activities of 0.2 and 0.42 nM, respectively. The cell culture 50% inhibitory concentration values (CCIC<sub>50S</sub>) for BCV were determined with a small panel of uninfected B and T cells.

Reference: Antimicrob Agents Chemother. 2007 Sep;51(9):3147-54. <https://pubmed.ncbi.nlm.nih.gov/17620375/>

## In vivo activity

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N/A

*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.*