

Product data sheet



MedKoo Cat#: 526101 Name: Ravuconazole CAS: 182760-06-1 Chemical Formula: C ₂₂ H ₁₇ F ₂ N ₅ OS Exact Mass: 437.1122 Molecular Weight: 437.47	
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.	

Product description:

Ravuconazole, also known as BMS-207147; ER-30346 ; ER-30346, is a potent triazole antifungal. Ravuconazole is currently in phase I/II clinical trials. Ravuconazole has shown to have a similar spectrum of activity to voriconazole, with an increased half-life.

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	20	45.72
DMF	25	57.15
Ethanol	5	11.43

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.29 mL	11.43 mL	22.86 mL
5 mM	0.46 mL	2.29 mL	4.57 mL
10 mM	0.23 mL	1.14 mL	2.29 mL
50 mM	0.05 mL	0.23 mL	0.46 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

- Zheng H, Song N, Mei H, Dong J, Li D, Li X, Liu W. In Vitro Activities of Ravuconazole and Isavuconazole against Dematiaceous Fungi. *Antimicrob Agents Chemother.* 2020 Aug 20;64(9):e00643-20. doi: 10.1128/AAC.00643-20. PMID: 32571811; PMCID: PMC7449202.
- Dong J, Liang G, Zheng H, Kan S, Song N, Zhang M, Liu W. In Vitro activity of ravuconazole against *Candida auris* and vaginal candida isolates. *Mycoses.* 2021 Jun;64(6):651-655. doi: 10.1111/myc.13260. Epub 2021 Mar 5. PMID: 33609301.

In vivo study

- Andes D, Marchillo K, Stamstad T, Conklin R. In vivo pharmacodynamics of a new triazole, ravuconazole, in a murine candidiasis model. *Antimicrob Agents Chemother.* 2003 Apr;47(4):1193-9. doi: 10.1128/AAC.47.4.1193-1199.2003. PMID: 12654646; PMCID: PMC152484.
- Clemons KV, Stevens DA. Efficacy of ravuconazole in treatment of mucosal candidosis in SCID mice. *Antimicrob Agents Chemother.* 2001 Dec;45(12):3433-6. doi: 10.1128/AAC.45.12.3433-3436.2001. PMID: 11709320; PMCID: PMC90849.

7. Bioactivity

Biological target:

Product data sheet



Ravuconazole (BMS-207147) is a potent and broad spectrum triazole antifungal. Ravuconazole is an inhibitor of sterol biosynthesis by inhibition of cytochrome P450 14 α -demethylase, an enzyme in the sterol biosynthesis pathway that leads from lanosterol to ergosterol.

In vitro activity

The minimum inhibitory concentration (MIC) values of ravuconazole and isavuconazole were lower than itraconazole's, voriconazole's, and posaconazole's. Ravuconazole and isavuconazole appear to be more efficient against most dematiaceous fungal infections than the other triazoles tested.

Reference: Antimicrob Agents Chemother. 2020 Aug 20;64(9):e00643-20. <https://pubmed.ncbi.nlm.nih.gov/32571811/>

In vivo activity

Ravuconazole treatment in SCID mice cleared infection in all tissues from 50% of mice. Ravuconazole has good efficacy and the potential to cure mucosal candidosis in the absence of a functional immune response.

Reference: Antimicrob Agents Chemother. 2001 Dec;45(12):3433-6. <https://pubmed.ncbi.nlm.nih.gov/11709320/>

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.