

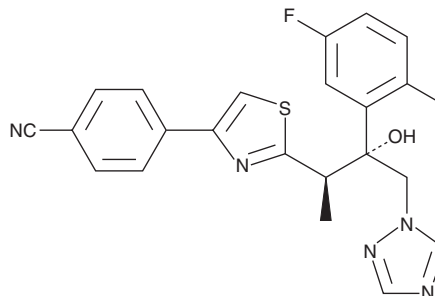
# PRODUCT INFORMATION



## Isavuconazole

Item No. 26211

**CAS Registry No.:** 241479-67-4  
**Formal Name:** 4-[2-[(1R,2R)-2-(2,5-difluorophenyl)-2-hydroxy-1-methyl-3-(1H-1,2,4-triazol-1-yl)propyl]-4-thiazolyl]-benzonitrile  
**Synonyms:** BAL4815, RO 0094815  
**MF:** C<sub>22</sub>H<sub>17</sub>F<sub>2</sub>N<sub>5</sub>OS  
**FW:** 437.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 285 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Isavuconazole is supplied as a crystalline solid. A stock solution may be made by dissolving the isavuconazole in the solvent of choice, which should be purged with an inert gas. Isavuconazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of isavuconazole in these solvents is approximately 5, 20, and 25 mg/ml, respectively.

Isavuconazole is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, isavuconazole should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Isavuconazole has a solubility of approximately 0.25 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Isavuconazole is a broad-spectrum triazole antifungal agent.<sup>1</sup> It inhibits the growth of clinical isolates of *A. fumigatus*, *A. terreus*, *A. flavus*, and *A. lentulus* (MIC<sub>90</sub>s = 0.39, 0.39, 2, and 0.25 mg/L, respectively) as well as *C. albicans*, *C. krusei*, and *C. parapsilosis* (MIC<sub>50</sub>s = 0.03, 0.06, and 0.03 mg/L, respectively).<sup>1-4</sup> Isavuconazole also inhibits the growth of several other fungal species, including clinical isolates of *C. neoformans* and *C. gattii* (MIC<sub>90</sub>s = 0.032 and 0.125 mg/L, respectively).<sup>1,2</sup> Formulations containing isavuconazole have been used in the treatment of invasive aspergillosis and mucormycosis.

### References

1. Yamazaki, T., Inagaki, Y., Fujii, T., *et al.* In vitro activity of isavuconazole against 140 reference fungal strains and 165 clinically isolated yeasts from Japan. *Int. J. Antimicrob. Agents* **36**(4), 324-331 (2010).
2. Datta, K., Rhee, P., Byrnes, E., III, *et al.* Isavuconazole activity against *Aspergillus lentulus*, *Neosartorya udagawae*, and *Cryptococcus gattii*, emerging fungal pathogens with reduced azole susceptibility. *J. Clin. Microbiol.* **51**(9), 3090-3093 (2013).
3. Rudramurthy, S.M., Chakrabarti, A., Geertsens, E., *et al.* In vitro activity of isavuconazole against 208 *Aspergillus flavus* isolates in comparison with 7 other antifungal agents: Assessment according to the methodology of the European Committee on Antimicrobial Susceptibility Testing. *Diagn. Microbiol. Infect. Dis.* **71**(4), 370-377 (2011).
4. Astvad, K.M.T., Hare, R.K., and Arendrup, M.C. Evaluation of the *in vitro* activity of isavuconazole and comparator voriconazole against 2635 contemporary clinical *Candida* and *Aspergillus* isolates. *Clin. Microbiol. Infect.* **23**(11), 882-887 (2017).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/15/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM