**Proteins** 

## **Product** Data Sheet

# (2S,3R)-Brassinazole

Cat. No.: HY-121161B CAS No.: 259200-31-2 Molecular Formula: C<sub>18</sub>H<sub>18</sub>ClN<sub>3</sub>O Molecular Weight: 327.81 Target: Others Pathway: Others

Powder Storage: -20°C 3 years

2 years

In solvent -80°C 6 months

> -20°C 1 month

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 20 mg/mL (61.01 mM; ultrasonic and warming and heat to 60°C)

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|-------------------------------|-----------|------------|------------|
|                              | 1 mM                          | 3.0505 mL | 15.2527 mL | 30.5055 mL |
|                              | 5 mM                          | 0.6101 mL | 3.0505 mL  | 6.1011 mL  |
|                              | 10 mM                         | 0.3051 mL | 1.5253 mL  | 3.0505 mL  |

Please refer to the solubility information to select the appropriate solvent.

## **BIOLOGICAL ACTIVITY**

Description (2S,3R)-Brassinazole, the enantiomer of Brassinazole (BRZ). Brassinazole inhibits brassinosteroid (BR) biosynthesis, via acting on the oxidative processes from 6-oxo-campestanol to teasterone. (2S,3R)-Brassinazole might be the most active

form of Brz<sup>[1][2][3]</sup>.

Brassinosteroid (BR) biosynthesis<sup>[1]</sup> IC<sub>50</sub> & Target

> Brassinazole (0.5, 1, 5 µM) causes markedly deformed seedlings, whose morphology is similar to that of BR-deficient mutants. Brassinazole causes cress dwarfism, altering leaf morphology such as the typical downward curl and dark green appearance of Arabidopsis BR-deficient mutants. However, administration of 10 nM BR reversed dwarfism<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **REFERENCES**

In Vitro

[1]. Yoshida Shigeo, et al. Preparation of (1,2,4-triazolyl)alkanols as specific inhibitors of brassinosteroid biosynthesis: Japan, JP2000053657. 2000-02-22.

| [2]. Asami T, et al. Mode of acti   | on of brassinazole: a specific            | inhibitor of brassinosteroid biosy                  | nthesis[M]. 2000.   |           |  |  |
|---|---|---|---|-----------|--|--|
| [3]. T Asami, et al. Characterization of Brassinazole, a Triazole-Type Brassinosteroid Biosynthesis Inhibitor. Plant Physiol. 2000 May;123(1):93-100. |   |   |   |           |  |  |
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