

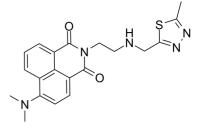
# **Data Sheet**

Product Name: Chitinase-IN-2
Cat. No.: CS-3502

CAS No.: 1579991-63-1
Molecular Formula: C20H21N5O2S

Molecular Weight: 395.48
Target: Others
Pathway: Others

Solubility: DMSO :  $\geq$  53 mg/mL (134.01 mM)



#### **BIOLOGICAL ACTIVITY:**

Chitinase-IN-2 is a insect chitinase and N- acetyl hexosaminidase inhibitor and pesticide; 50  $\mu$ M/20  $\mu$ M compound concentration's inhibitory percentage are 98%/92% for chitinase/N- acetyl-hexosaminidase respectively.

## PROTOCOL (Extracted from published papers and Only for reference)

Enzyme assay [1] Determination of enzyme activity: the enzyme activity measurement buffer (20 mM NaH2PO4, pH6.8) were mixed in a 96-well plate to a final volume of 54  $\mu$ 1, was added 6  $\mu$  15 mM pNP- $\beta$  - (GlcNAc) 2 starting reaction, 25 °C incubation 5min, 60  $\mu$  10.5 M Na2CO3 was added to terminate the reaction, the absorbance was measured at 405 nm. Compound inhibitory activity determination: The enzyme with various concentrations of inhibitor were incubated at room temperature for IOmin, respectively at substrate concentrations of 0.1 mM and 0.2 mM enzyme activity was determined with the method described above. Inhibition constant (Ki) use Dixon plots linear regression data fitting.

## **References:**

[1]. thalimide derivative and application thereof as enzyme inhibitor and pesticide . Patent CN 103641825 A

#### **CAIndexNames**:

1H-Benz[de]isoquinoline-1,3(2H)-dione, 6-(dimethylamino)-2-[2-[[(5-methyl-1,3,4-thiadiazol-2-yl)methyl]amino]ethyl]-

## **SMILES:**

O = C(C1 = CC = CC2 = C1C3 = CC = C2N(C)C)N(CCNCC4 = NN = C(C)S4)C3 = O

Caution: Product has not been fully validated for medical applications. For research use only.

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