

Product Name : DIMBOA

Synonyms : —

Cat No. : M21763

CAS Number : 15893-52-4

Molecular Formula : C₉H₉NO₅

Formula Weight : 211.17

Chemical Name : —

Description : DIMBOA, an antibiotic, is a benzoxazinoid, part of the chemical defense system of graminaceous plants such as maize, wheat, and rye. DIMBOA possess growth inhibitory properties against many strains of studied bacteria and fungi, such as *Staphylococcus aureus*, *Escherichia coli* as well as against *Saccharomyces cerevisiae*. DIMBOA exhibits a potent free-radical scavenging activity and a weaker iron (III) ions reducing activity. Antioxidant activity.

Pathway : GPCR/G Protein

Target : Antibacterial

Receptor : —

Solubility : DMSO : 125 mg/mL(591.94 mM;Need ultrasonic)

SMILES : O=C1C(O)OC2=CC(OC)=CC=C2N1O

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Gleńsk M, et al. In vitro evaluation of the antioxidant and antimicrobial activity of DIMBOA [2,4-dihydroxy-7-methoxy-2H-1,4-benzoxazin-3(4H)-one]. *Nat Prod Res.* 2016;30(11):1305-1308.
2. Sasai H, et al. Species-specific glucosylation of DIMBOA in larvae of the rice Armyworm. *Biosci Biotechnol Biochem.* 2009;73(6):1333-1338.
3. Phuong, T.T.T., Yamamoto, M., Fujii, T. et al. Comparison of the ability to catabolize DIMBOA, a maize antibiotic, between *Ostrinia furnacalis* and *Ostrinia scapularis* (Lepidoptera: Crambidae), with reference to their hybrids. *Appl Entomol Zool* 51, 143–149 (2016).