## **Product** Data Sheet

## **D-Isofloridoside**

Molecular Weight:

Cat. No.: HY-N10176 CAS No.: 23202-76-8 Molecular Formula:  $C_9H_{18}O_8$ 

254.23 Target: Reactive Oxygen Species; MMP

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κΒ

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

| Description | D-Isofloridoside, one of the polysaccharide precursors, has the activity of scavenging free radicals, inhibiting ROS expression, and inhibiting MMP-2 and MMP- $9^{[1][2]}$ .   |
|-------------|---|
| In Vitro    | D-Isofloridoside can reduce the activity of MMP-2/9, and can inhibit the expression of hypoxia-inducible factor-1 $\alpha$ (HIF-1 $\alpha$ ) by regulating the downstream PI3K/AKT and MAPK pathways, thereby down-regulating the production of vascular endothelial growth factor (VEGF) in CoCl <sub>2</sub> -induced HT1080 cell. D-Isofloridoside can inhibit the activation of VEGF receptor (VEGFR-2), regulate downstream PI3K/AKT, MAPK, NF- $\kappa$ B signal pathways, activate apoptosis, and thus down-regulate the production of platelet-derived growth factor (PDGF) in VEGF-induced HUVEC <sup>[2]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

## **REFERENCES**

[1]. Yang S, et al. Mechanism Analysis of Antiangiogenic d-Isofloridoside from Marine Edible Red algae Laurencia undulata in HUVEC and HT1080 cell. J Agric Food Chem. 2021 Nov 12.

[2]. Yang S, et al. The Protective Effect of the Polysaccharide Precursor, D-Isofloridoside, from Laurencia undulata on Alcohol-Induced Hepatotoxicity in HepG2 Cells. Molecules. 2020;25(5):1024. Published 2020 Feb 25.

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

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