Product Data Sheet

Esculin sesquihydrate

Cat. No.: HY-W166297 **CAS No.:** 66778-17-4

Molecular Formula: $C_{15}H_{16}O_{9}\cdot 3/2H_{2}O$

Molecular Weight: 367.31

Target: p38 MAPK

Pathway: MAPK/ERK Pathway

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

Analysis.

HO OH OH

3/2 H₂O

BIOLOGICAL ACTIVITY

Description Esculin sesquihydrate, a fluorescent coumarin glucoside, is an active ingredient of ash bark. Esculin sesquihydrate

ameliorates cognitive impairment in experimental diabetic nephropathy (DN), and exerts anti?oxidative stress and anti?inflammatory effects, via the MAPK signaling pathway^{[1][2]}.

CUSTOMER VALIDATION

- Phytomedicine. 23 August 2021, 153687.
- Plant Direct. 2022 Sep 2;6(9):e442.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Knox K, et al. The Coumarin Glucoside, Esculin, Reveals Rapid Changes in Phloem-Transport Velocity in Response to Environmental Cues. Plant Physiol. 2018 Oct;178(2):795-807.

[2]. Song Y, et al. Esculin ameliorates cognitive impairment in experimental diabetic nephropathy and induces anti-oxidative stress and anti-inflammatory effects via the MAPK pathway. Mol Med Rep. 2018 May;17(5):7395-7402.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 1 of 1

Screening Libraries •

Inhibitors

Proteins