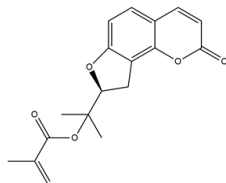


PRODUCT: Columbianadin**ALTERNATE NAMES:** Zosimin, 8-O-angeloyl-8,9-dihydrooroseleol**CATALOG #:** B1334-5, -25**AMOUNT:** 5 mg, 25 mg**STRUCTURE:****MOLECULAR FORMULA:** C₁₉H₂₀O₅**MOLECULAR WEIGHT:** 328.36**CAS NUMBER:** 5058-13-9**APPEARANCE:** White crystalline solid**SOLUBILITY:** Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc**PURITY:** ≥98% by HPLC**STORAGE:** Store at -20 °C. Protect from air and light.**DESCRIPTION:** Columbianadin (CBN) is a coumarin-type compound and one of the main bioactive constituents of the underground part of the herb, *Angelica pubescens* Maxim.f.biserrata Shan et Yuan dried roots. Columbianadin has calcium-channel blocking function, can inhibit depolarization induced Ca²⁺ uptake in rat pituitary GH3 cells.**REFERENCES:**

1. Zhang Y B et al., *Phytochemistry*, 2012, 81(1):109-16.
2. Törnquist K et al., *Planta Med.*, 1990, 56(1):127-9.
3. Lim H J et al., *J. Ethnopharmacol.*, 2014, 155(2):1353-61.
4. Lee J H et al., *Planta Med.*, 2014,.80 - P2O53.
5. Kang Ji In et al., *Biomol. Ther.*, 2016, 24(3):320-7.
6. Zhang Y B et al., *Biomed. Chromatogr.*, 2010, 24(4):433–7.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.**RELATED PRODUCTS:**

- Coumarin Boronic acid (Cat# B1029)
- 7-Amino-4-methylcoumarin (Cat# 1844)
- AFC (7-amino-4-trifluoromethyl-coumarin) (Cat# 1077)

USAGE: ***FOR RESEARCH USE ONLY! Not to be used in humans***