**Product Information**

**Name:** Ampelopsin  
**Catalog No.:** CFN98326  
**Cas No.:** 27200-12-0  
**Purity:** > 98%  
**M.F:** C_{15}H_{12}O_8  
**M.W:** 320.3  

**Physical Description:** Powder  
**Synonyms:** (2R,3R)-3,5,7-trihydroxy-2-(3,4,5-trihydroxyphenyl)-3,4-dihydro-2H-benzopyran-4-one.

**Intended Use**

1. Reference standards;  
2. Pharmacological research;  
3. Food research;  
4. Cosmetic research;  
5. Synthetic precursor compounds;  
6. Care and daily chemicals;  
7. Intermediates & Fine Chemicals;  
8. Ingredient in supplements, beverages;  
9. Aromatics;  
10. Others.
[Source]

The herb of Myrica rubra (Lour.) Zucc.

[Biological Activity or Inhibitors]

Ampelopsin (AMP), a plant flavonoid, has potent anti-inflammatory properties in vitro and in vivo, the anti-inflammatory effect of ampelopsin is due to inhibiting the interconnected ROS/Akt/IKK/NF-κB signaling pathways.\(^1\)

Ampelopsin has hepatoprotective activity, it acts to prevent the oxidative stress in vivo that may have been due to active oxygen species formed by a macrophage by the action of GalN.\(^2\)

Ampelopsin can inhibit Bel-7402 proliferation through inducing cell apoptosis, the mechanism might be that ampelopsin could directly or indirectly enhance the level of anti-apoptosis protein Bcl-2 and decrease the level of apoptosis protein Bax.\(^3\)

Ampelopsin, a major antifungal constituent from Salix sachalinensis, and its methyl ethers.\(^4\)

Ampelopsin is a potent antioxidant, it increases cellular antioxidant defense through activation of the ERK and Akt signaling pathways, which induces heme oxygenase-1 (HO-1) expression and thereby protects PC12 cells from H60O60-induced apoptosis.\(^5\)

Ampelopsin sodium exhibits antitumor effects against bladder carcinoma in orthotopic xenograft models.\(^6\)

Ampelopsin suppresses breast carcinogenesis by inhibiting the mammalian target of rapamycin (mTOR) signalling pathway, it is a bioactive natural chemopreventive agent against breast carcinogenesis and is an effective mTOR inhibitor that may be developed as a useful chemotherapeutic agent in the treatment of breast cancer.\(^7\)

Ampelopsin has reversal effect on multidrug resistance in K562/ADR cells, it can increase the cytotoxicity and the intracellular accumulation of chemotherapeutic drugs in multidrug resistance (MDR) associated tumor cells through inhibiting the efflux of drugs by
P-gp.AMP may be a promising MDR modulator.\textsuperscript{[8]}

Ampelopsin has anti-invasive and anti-metastatic effects on melanoma.\textsuperscript{[9]}

[ **Solvent** ]

Chloroform, Dichloromethane, DMSO, Acetone, etc.

[ **HPLC Method** ]\textsuperscript{[10]}

Mobile phase: Acetonitrile-2% Acetic acid H2O=10:90;
Flow rate: 1.0 ml/min;
Column temperature: Room Temperature;
The wave length of determination: 290 nm.

[ **Storage** ]

2-8˚C, Protected from air and light, refrigerate or freeze.

[ **References** ]

[Contact]

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