[ **Product Information** ]

**Name:** Medicarpin

**Catalog No.:** CFN98411

**Cas No.:** 32383-76-9

**Purity:** > 98%

**M.F:** C_{16}H_{14}O_{4}

**M.W:** 270.3

**Physical Description:** Oil

**Synonyms:** (6aR,11aR)-9-methoxy-6a,11a-dihydro-6H-benzofuro[3,2-c][1]benzopyran-3-ol; 3-Hydroxy-9-methoxyppterocarpan.

[ **Intended Use** ]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

[ **Source** ]

The herb of *Hedysarum polybotrys Hand. -Mazz.*
**[ Biological Activity or Inhibitors]**

Medicarpin, a legume phytoalexin, acts as an estrogen receptor (ER) agonist, can stimulate osteoblast differentiation likely via ERβ, promote achievement of peak bone mass, and is devoid of uterine estrogenicity; in addition, given its excellent oral bioavailability, it can be potential osteogenic agent.[1]

Medicarpin exhibits no uterine estrogenicity, however it can inhibit osteoclastogenesis and has nonestrogenic bone conserving effect in ovariectomized mice.[2]

Medicarpin and maackiain and two of their biosynthetic precursors inhibit the constitutive and phenobarbital (PB)-induced types of AHH, but have little effect on the 3-methylcholanthrene (MC)-induced type of AHH, suggests the utility of medicarpin as a probe for different forms of cytochrome P-450 in animal tissues.[3]

Medicarpin sensitizes myeloid leukemia cells to TRAIL-induced apoptosis through the induction of DR5 and activation of the ROS-JNK-CHOP pathway.[4]

Medicarpin has antifungal activity. [5]

**[ Solvent ]**
Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

**[ HPLC Method ]**[6]
Mobile phase: Acetonitrile-0. 2% H3PO4 in H2O, gradient elution ;
Flow rate: 1.0 ml/min;
Column temperature: 35 ℃;
The wave length of determination: 240 nm.

**[ Storage ]**
2-8 ℃, Protected from air and light, refrigerator or freeze.

**[ References ]**

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