[ **Product Information** ]

**Name:** Protopine  
**Catalog No.:** CFN99399  
**Cas No.:** 130-86-9  
**Purity:** >=98%  
**M.F:** C\textsubscript{20}H\textsubscript{19}NO\textsubscript{5}  
**M.W:** 353.37  

**Physical Description:** Powder  

**Synonyms:** 7,13a-Secobarbin-13a-one, 7-methyl-2,3:9,10-bis(methylenedioxy)-; 7-Methyl-6,8,9,16-tetrahydrodi[1,3]benzodioxolo[4,5-c:5,6-g]azecin-15(7H)-one; Biflorine; Bis[1,3]benzodioxolo[4,5-c:5',6'-g]azecin-13(5H)-one,4,6,7,14-tetrahydro-5-methyl-; Corydinine; Hypercorine; Protopin; BiflorinI.

[ **Intended Use** ]

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

[ **Source** ]

The tubers of *Corydalis yanhusuo* W. T. Wang.
[ Biological Activity or Inhibitors]

Protopine is an isoquinoline alkaloid contained in plants in northeast Asia, it can reduce the inflammatory activity of lipopolysaccharide-stimulated murine macrophages, the inhibitory effects is caused by blocking phosphorylation of mitogen-activated protein kinases (MAP kinases) and also blocking activation of a nuclear factor kappa-light-chain-enhancer of activated B cells (NF-κB).[1]

In vivo, pretreatment with protopine (50-100 mg·kg⁻¹) protects rabbits from the lethal effects of AA (2 mg·kg⁻¹) or PAF (11 micrograms·kg⁻¹) in dose-dependent fashion, protopine (50-100 mg·kg⁻¹) also inhibits carrageenan-induced rat paw oedema with a potency of three-fold as compared to aspirin, suggests that protopine acts as a potent inhibitor of thromboxane synthesis and PAF with anti-inflammatory properties.[2]

Protopine has protective effects on hydrogen peroxide-induced oxidative injury of PC12 cells via Ca 2+ antagonism and antioxidant mechanisms. [3]

Protopine has hepatoprotective potential of Fumaria indica Pugsley whole plant extracts.[4]

Protopine inhibits serotonin transporter and noradrenaline transporter and has the antidepressant-like effect in mice models.[5]

Protopine has antispasmodic and relaxant activity on isolated guinea-pig ileum.[6]

Protopine, a novel microtubule-stabilizing agent, causes mitotic arrest and apoptotic cell death in human hormone-refractory prostate cancer cell lines.[7]

[ Solvent ]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

[ HPLC Method ][8]

Mobile phase: Methanol--0.2%Phosphoric acid(adjusted to pH 7.0 with triethylamine ) = 50:50;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;
The wavelength of determination: 254 nm.

[ Storage ]

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

[ References ]


[ Contact ]

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