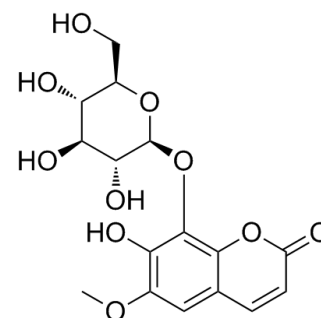


Fraxin

Cat. No.:	HY-N0579
CAS No.:	524-30-1
Molecular Formula:	C ₁₆ H ₁₈ O ₁₀
Molecular Weight:	370.31
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	Fraxin isolated from <i>Acer tegmentosum</i> , <i>F. ornus</i> or <i>A. hippocastanum</i> , is a glucoside of fraxetin and reported to exert potent anti-oxidative stress action ^[1] , anti-inflammatory and antimetastatic properties. Fraxin shows its antioxidative effect through inhibition of cyclo AMP phosphodiesterase enzyme ^[2] .
IC₅₀ & Target	Cyclo AMP phosphodiesterase enzyme ^[2] .
In Vitro	Fraxin (100 μM) is non-cytotoxic on Hep G2 cells. Fraxin at non-cytotoxic concentrations significantly decreases the t-BHP-induced ROS generation in a dose-dependent manner ^[1] . Fraxin (0.5 mM) shows free radical scavenging effect at high concentration and cell protective effect against H ₂ O ₂ -mediated oxidative stress ^[2] .
In Vivo	Fraxin (50 mg/kg, p.o.) significantly blocks the CCl ₄ -induced elevation of ALT and AST. Fraxin (10 and 50 mg/kg, p.o.) significantly reduces the GSSG levels (1.7±0.3 and 1.5±0.2 nM/g liver, respectively) compared with the GSSG levels of the CCl ₄ -treated group ^[1] .

REFERENCES

[1]. Fraxin (50 mg/kg, p.o.) significantly blocks the CCl₄-induced elevation of ALT and AST. Fraxin (10 and 50 mg/kg, p.o.) significantly reduces the GSSG levels (1.7±0.3 and 1.5±0.2 nM/g liver, respectively) compared with the GSSG levels of the CCl₄-treated group^[1].

[2]. Whang WK, et al. Natural compounds, fraxin and chemicals structurally related to fraxin protect cells from oxidative stress. *Exp Mol Med*. 2005 Oct 31;37(5):436-46.

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