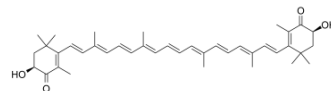


Astaxanthin

Cat. No.:	HY-B2163		
CAS No.:	472-61-7		
Molecular Formula:	C ₄₀ H ₅₂ O ₄		
Molecular Weight:	596.84		
Target:	PPAR; Reactive Oxygen Species		
Pathway:	Cell Cycle/DNA Damage; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : < 1 mg/mL (insoluble or slightly soluble)
----------	--

BIOLOGICAL ACTIVITY

Description	Astaxanthin, a red dietary carotenoid isolated from <i>Haematococcus pluvialis</i> , is a modulator of PPAR γ and a potent antioxidant with antiproliferative, neuroprotective and anti-inflammatory activity ^[1] . Astaxanthin has potential in the treatment of various diseases, such as cancers and Parkinson's disease, cardiovascular disease ^[2] . Due to its bright red colour, Astaxanthin could be used as a food colorant in animal feeds ^[3] .
-------------	--

IC ₅₀ & Target	PPAR γ
---------------------------	---------------

REFERENCES

- [1]. Yang Y, et al. Epigenetic CpG Methylation of the Promoter and Reactivation of the Expression of GSTP1 by Astaxanthin in Human Prostate LNCaP Cells. *AAPS J.* 2017 Mar;19(2):421-430.
- [2]. Desheng Fu, et al. Effect of astaxanthin on retinal pigment epithelial cells in high glucose: an invitro study. *Biomedical Research* 2017; 28 (15): 6839-6843.
- [3]. Rachel K Johnston, et al. Effects of astaxanthin on *Brachionus manjavacas* (Rotifera) population growth. *Aquaculture Research.* 2018;49:2278-2287.

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