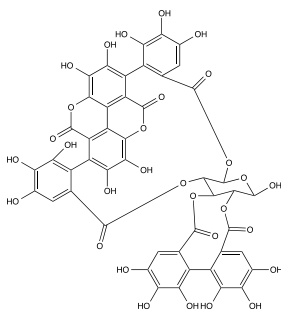


Catalog #10-4583

Punicalagin

CAS# 65995-63-3

Lot # FBA3080



Punicalagin is a polyphenolic compound isolated from pomegranates possessing antioxidant, anti-inflammatory, and antitumorigenic properties.^{1,2} It has been shown to reduce high glucose-induced neural tube defects by blocking cellular stress and caspase activation.³ Punicalagin prevented high-fat diet induced obesity associated accumulation of cardiac triglyceride and cholesterol as well as myocardial damage via AMPK mediated modulation of mitochondria and phase II enzymes.⁴

- 1) Seeram *et al.* (2005), *In vitro antiproliferative, apoptotic and antioxidant activities of punicalagin, ellagic acid and a total pomegranate tannin extract are enhanced in combination with other polyphenols as found in pomegranate juice*; J.Nutr.Biochem. **16** 360
- 2) Adams *et al.* (2006), *Pomegranate Juice, Total Pomegranate Ellagitannins, and Punicalagin Suppress Inflammatory Cell Signaling in Colon Cancer Cells*; J.Agric.Food Chem. **54** 980
- 3) Zhong *et al.* (2015), *Punicalagin exerts protective effect against high glucose-induced cellular stress and neural tube defects*; Biochem.Biophys.Res.Comm. **467** 179
- 4) Cao *et al.* (2015), *Punicalagin, an active component in pomegranate, ameliorates cardiac mitochondrial impairment in obese rats via AMPK activation*; Sci.Rep. **5** 14014

PHYSICAL DATA

Molecular Weight:	1084.72
Molecular Formula:	C ₄₈ H ₂₈ O ₃₀
Purity:	>98% by TLC
	NMR: Conforms
Solubility:	Water (>20mg/mL)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in water may be stored at -20°C for up to 2 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.