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Product Information

Product ID G4781 CAS No. 21414-41-5

Chemical Name

Synonym

Formula C₁₂H₂₂KNO₁₀S₃ • xH₂O

Formula Wt. 475.60

Melting Point

Purity ≥98%

Solubility Soluble in water.

 xH_2O

Bulk quanitites available upon request

Product ID	Size
G4781	1 mg
G4781	5 mg
G4781	10 mg
G4781	25 mg

Store Temp 4°C

Ship Temp Ambient

Description Glucoraphanin is a glucosinolate originally found in cruciferous vegetables of the *Brassicaceae* family, such as broccoli. Glucoraphanin exhibits anti-inflammatory and neuroprotective activities. In an animal model of spinal cord injury, glucoraphanin decreases histological inflammatory damage. In an animal model of restraint stress, this compound decreases stress-induced production of TNF- α and IL-18 and also increases IL-10 levels. Glucoraphanin decreases dopamine transporter degradation, expression of tyrosine hydrolase, and release of IL-16 and ROS as well as apoptosis in MPTP-induced animal models of Parkinson's disease. In animal models of multiple sclerosis (experimental autoimmune encephalitis; EAE), glucoraphanin decreases translocation of NF-kB, release of pro-inflammatory cytokines, and apoptosis.

Weight is on anhydrous basis.

References Galuppo M, Giacoppo S, De Nicola GR, et al. RS-Glucoraphanin bioactivated with myrosinase treatment counteracts proinflammatory cascade and apoptosis associated to spinal cord injury in an experimental mouse model. J Neurol Sci. 2013 Nov 15;334(1-2):88-96. PMID: 23992921.

> Galuppo M, Iori R, De Nicola GR, et al. Anti-inflammatory and anti-apoptotic effects of (RS)-glucoraphanin bioactivated with myrosinase in murine sub-acute and acute MPTP-induced Parkinson's disease. Bioorg Med Chem. 2013 Sep 1;21(17):5532-47. PMID: 23810671

> Foti Cuzzola V, Galuppo M, Iori R, et al. Beneficial effects of (RS)-glucoraphanin on the tight junction dysfunction in a mouse model of restraint stress. Life Sci. 2013 Aug 28;93(7):288-305. PMID: 23871805.

> Giacoppo S, Galuppo M, Iori R, et al. Protective role of (RS)-glucoraphanin bioactivated with myrosinase in an experimental model of multiple sclerosis. CNS Neurosci Ther. 2013 Aug;19(8):577-84. PMID: 23638842.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.