Web: lktlabs.com

Product Information

Product ID P2997 CAS No. 83-86-3

Chemical Name

Synonym Inositol hexaphosphate, Alkovert, Phytate, myo-Inosistol

hexakisphosphate

Formula $C_6H_{18}O_{24}P_6$ Formula Wt. 660.04

Melting Point

Purity ≥40%

Solubility Soluble in water.

OH HO O=P-OH HO-P=0 0 0 Ō O=P-OH HO-P=O OH

Pricing and Availability

Bulk quanitites available upon request

Size Product ID **List Price** P2997 100 mL \$141.80 P2997 500 mL \$509.00

Store Temp Ambient Ship Temp Ambient

Description Phytic acid is a saturated cyclic acid used to store phosphorus in plants; it is non-digestible in humans but is occasionally used in cattle feed. Phytic acid exhibits anticancer, anti-osteoporotic, anti-ulcerative, and anti-inflammatory activities. In colorectal adenocarcinoma cells, phytic acid increases expression of caspase 3, caspase 8, and Bax, decreases expression of Bcl-xl, and induces apoptosis. In clinical settings, high levels of this compound are associated with increases in bone mineral density. Additionally, phytic acid decreases edema and protects against NSAID-induced ulcer formation in animal models.

References Shafie NH, Esa NM, Ithnin H, et al. Pro-apoptotic effect of rice bran inositol hexaphosphate (IP6) on HT-29 colorectal cancer cells. Int J Mol Sci. 2013 Dec 2;14(12):23545-58. PMID: 24317430.

> Lopez-Gonzalez AA, Grases F, Perello J, et al. Phytate levels and bone parameters: a retrospective pilot clinical trial. Front Biosci (Elite Ed). 2010 Jun 1;2:1093-8. PMID: 20515779.

Sudheer Kumar M, Sridhar Reddy B, Kiran Babu S, et al. Antiinflammatory and antiulcer activities of phytic acid in rats. Indian J Exp Biol. 2004 Feb; 42(2):179-85. PMID: 15282951.

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