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Product Information

Product ID 15313

CAS No. 157810-81-6

Chemical Name

Synonym Crixivan

Formula C₃₆H₄₇N₅O₄ • H₂O₄S

Formula Wt. 711.87

Melting Point

Purity ≥98%

Solubility Soluble in Water

H₂SO₄

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
I5313	100 mg	\$45.00
I5313	1 g	\$57.60
I5313	5 g	\$123.60
I5313	25 g	\$527.30

Store Temp Ambient Ship Temp Ambient

Description Indinavir is an antiviral drug that treats HIV, acting as a protease inhibitor; this compound also exhibits anti-diabetic and anticancer chemotherapeutic activities. Like other antivirals, indinavir also exerts effects on insulin resistance and glucose tolerance. In vitro, indinavir decreases phosphorylation of the insulin receptor B subunit, inhibits the GLUT4 glucose transporter, and decreases levels of the insulin receptor, sterol regulatory element binding protein 1 (SREBP1), and PPAR-y, impairing adipocyte function and altering insulin sensitivity. In diabetic rats, indinavir increases glucose tolerance and hyperglycemia, potentially though induction of the suppressor of cytokine signaling 1 (SOCS1) signaling cascade. Indinavir may also exhibit chemotherapeutic potential, as it inhibits adenocarcinoma tumor growth in vivo; this activity may be dependent on inhibition of matrix metalloproteinases. Additionally, indinavir inhibits multiple isotypes of calpain, preventing apoptosis in cellular models. TEST!!!!!!

References Ismail WI, King JA, Anwar K, et al. Indinavir and nelfinavir inhibit proximal insulin receptor signaling and salicylate abrogates inhibition: potential role of the NFkappa B pathway. J Cell Biochem. 2013 Aug; 114(8):1729-37. PMID: 23386514.

> Toschi E, Sgadari C, Malavasi L, et al. Human immunodeficiency virus protease inhibitors reduce the growth of human tumors via a proteasome-independent block of angiogenesis and matrix metalloproteinases. Int J Cancer. 2011 Jan 1;128(1):82-93. PMID: 20617515.

> Carper MJ, Cade WT, Cam M, et al. HIV-protease inhibitors induce expression of suppressor of cytokine signaling-1 in insulinsensitive tissues and promote insulin resistance and type 2 diabetes mellitus. Am J Physiol Endocrinol Metab. 2008 Mar;294(3): E558-67. PMID: 18171911.

Ghibelli L, Mengoni F, Lichtner M, et al. Anti-apoptotic effect of HIV protease inhibitors via direct inhibition of calpain. Biochem Pharmacol. 2003 Oct 15;66(8):1505-12. PMID: 14555228.

Murata H, Hruz PW, Mueckler M. Indinavir inhibits the glucose transporter isoform Glut4 at physiologic concentrations. AIDS. 2002 Apr 12;16(6):859-63. PMID: 11919487.

Caron M, Auclair M, Vigouroux C, et al. The HIV protease inhibitor indinavir impairs sterol regulatory element-binding protein-1 intranuclear localization, inhibits preadipocyte differentiation, and induces insulin resistance. Diabetes. 2001 Jun;50(6):1378 -88. PMID: 11375339.

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