Product Data Sheet

Product Name: β-Interleukin I (163-171), human
Cat. No.: GP10096

Chemical Properties

Cas. No.	106021-96-9		
Chemical Name	β-Interleukin I (163-171), human		
SMILES	CC(C)C(C(=O)NC(CCC(=O)N)C(=O)NCC(=O)NC(CCC(=O)O)C(=O)NC(CCC(=O)O)C(=O)NC(CO)C(=O)NC(CC(=O)N)C(=O)NC(CC(=O)C		
Formula	$C_{39}H_{64}N_{12}O_{19}$	M.Wt	1004.99
Solubility	≥ 100.4mg/mL in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	β-Interleukin I (163-171), human		

Background

β-Interleukin I (163-171), human($C_{39}H_{64}N_{12}O_{19}$), a peptide with the sequence Val-Gln-Gly-Glu-Glu-Ser-Asn-Asp-Lys, MW= 1005. Interleukins are a group of cytokines (secreted proteins/signaling molecules) that were first seen to be expressed by white blood cells (leukocytes). Interleukin 1 alpha and interleukin 1 beta (IL-1 alpha and IL-1 beta) are cytokines that participate in the regulation of immune responses, inflammatory reactions, and hematopoiesis.

Interleukin-1 beta (IL-1β) also known as catabolin, is a cytokine protein that in humans is encoded by the*IL1B* gene. IL-1β precursor is cleaved by caspase 1 (interleukin 1 beta convertase). Cytosolic thiol protease cleaves the product to form mature IL-1β. IL-1β is a member of the interleukin 1 cytokine family. This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis.

Figure1 Formula of b-Interleukin I (163-171), human

Figure2 Structure of b-Interleukin I

Ref:

1. Contassot E, Beer HD, French LE (2012). "Interleukin-1, inflammasomes, autoinflammation and the skin". *Swiss Med Wkly* **142**: w13590

2. Matzinger P (2012). "The evolution of the danget theory. Interview by Lauren Constable, Commissioning Editor".*Expert Rev Clin Immunol* **8** (4): 311-7.

3. Sahoo M, Ceballos-Olvera I, del Barrio L, Re F (2011). "Role of the inflammasome, IL-1β, and IL-18 inbacterial infections". *ScientificWorldJournal* **11**: 2037-50.

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA