Animal-Free IP-10/CRG-2/CXCL10 Protein, Mouse (His)

Cat. No.:	HY-P700168AF
Synonyms:	IP-10; Gamma-Interferon Inducible Protein 10; Crg-2
Species:	Mouse
Source:	E. coli
Accession:	P17515 (I22-P98)
Gene ID:	15945
Molecular Weight:	Approximately 9.47 kDa

PROPERTIES

AA Sequence	I P L A R T V R C N C I H I D D G P V R M R A I G K L E I I P A S L S C P R V E I I A T M K K N D E Q R C L N P E S K T I K N L M K A F S Q K R S K R A P
Biological Activity	Measure by its ability to chemoattract BaF3 cells transfected with human CXCR3. The ED_{50} for this effect is <0.2 μg/mL
Appearance	Lyophilized powder.
Formulation	Lyophilized from a solution containing 1X PBS, pH 7.4.
Endotoxin Level	<0.1 EU per 1 μg of the protein by the LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US;may vary elsewhere.

DESCRIPTION

Background	The IP-10/CRG-2/CXCL10 Protein is a pro-inflammatory cytokine that is involved in various processes such as chemotaxis, differentiation, and activation of immune cells, as well as the regulation of cell growth, apoptosis, and modulation of angiostatic effects. It plays a crucial role during viral infections by stimulating the activation and migration of immune cells to the infected sites. Mechanistically, it binds to the CXCR3 receptor, which activates G protein-mediated signaling and leads to the activation of the phospholipase C-dependent pathway, increased intracellular calcium production, and actin reorganization. This activation of the CXCL10/CXCR3 axis is also important in neurons in response to brain injury, as it activates microglia and directs them to the site of injury, facilitating neuronal reorganization. The IP-10/CRG-2/CXCL10 Protein can exist as a monomer, dimer, or tetramer and interacts with the CXCR3 receptor.

Caution: Product has not been fully validated for medical applications. For research use only.

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