

CXCL8 Protein, Rhesus macaque (His)

Cat. No.:	HY-P71904A
Synonyms:	CXCL8; IL8Interleukin-8; IL-8; C-X-C motif chemokine 8; Chemokine; C-X-C motif; ligand 8
Species:	Rhesus Macaque
Source:	E. coli
Accession:	P67813 (A23-P101)
Gene ID:	613028
Molecular Weight:	Approximately 11 kDa

PROPERTIES

AA Sequence	<p>A V L P R S A K E L R C E C I K T Y S K P F H P K F I K E L R V I E S G P H C A</p> <p>N T E I I V K L S D G R E L C L D P K E P W V Q R V V E K F V K R A E N Q N P</p>
Biological Activity	Measured in a cell proliferation assay using HUVEC human umbilical vein endothelial cells. The ED ₅₀ for this effect is 8.054-11.39 ng/mL, corresponding to a specific activity is 1.24×10 ⁵ to 8.78×10 ⁴ units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 50 mM Tris-HCL, 300 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
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	<p>CXCL8 protein functions as a critical chemotactic factor that orchestrates the inflammatory response by attracting neutrophils, basophils, and T-cells, thereby aiding in the clearance of pathogens and safeguarding the host from infections. Additionally, CXCL8 plays a pivotal role in activating neutrophils. Upon release in response to inflammatory stimuli, CXCL8 exerts its effects by binding to the G-protein-coupled receptors CXCR1 and CXCR2, predominantly present in neutrophils, monocytes, and endothelial cells. The G-protein heterotrimer (alpha, beta, gamma subunits) constitutively binds to the CXCR1/CXCR2 receptor, and activation by CXCL8 results in the release of beta and gamma subunits from Gα_i (GNAI2 in neutrophils), subsequently activating various downstream signaling pathways, including PI3K and MAPK pathways. CXCL8</p>
-------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

forms homodimers, and its interaction with TNFAIP6 via the Link domain interferes with chemokine binding to glycosaminoglycans, suggesting a regulatory role in modulating chemokine activity within the inflammatory microenvironment.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA