

Product Data Sheet

CXCR4 Protein, Human (Cell-Free, His)

Cat. No.:	HY-P700546
Synonyms:	C-X-C chemokine receptor type 4; CXC-R4; LESTR; LAP-3; NPYRL; CD184; SDF-1 receptor
Species:	Human
Source:	E. coli Cell-free
Accession:	P61073-2 (M1-S356)
Gene ID:	7852
Molecular Weight:	Observed band size:Monomer: 44 kDa Dimer: 100 kDa It is speculated that the protein forms a dimeric structure.

AA Sequence MSIPLPLLQI YTSDNYTEEM GSGDYDSMK NKIFLPTIYS IIFLTGIVGN GLVILVMGY RLHLSVADLL FVITLPFWAV DAVANWYFG TVNLYSSVLI LAFISLDRYL AIVHATNSQ YVGVWIPALL LTIPDFIFAN VSEADDRYI VVFQFQHIMV GLILPGIVIL SCYCIIISK ALKTTVILIL AFFACWLPYY IGISIDSFI ENTVHKWISI TEALAFFACC LNPILYAFL TSVSRGSSL KILSKGKRGG HSSVSTESE Appearance Lyophilized powder Formulation Lyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% Trehald Storage & Stability Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week of recommended to freeze aliquots at -20°C or -80°C for extended storage.	PROPERTIES						
AA SequenceM S I P L P L L Q IY T S D N Y T E E MG S G D Y D S M KN K I F L P T I Y SI I F L T G I V G NG L V I L V M G Y YR L H L S V A D L LF V I T L P F WA VD A V A N W Y F G YT V N L Y S S V L IL A F I S L D R Y LA I V H A T N S QY V G V W I P A L LL T I P D F I F A NV S E A D D R Y IV V F Q F Q H I M VG L I L P G I V I LS C Y C I I I S KA L K T T V I L I LA F F A C W L P Y YI G I S I D S F IE N T V H K W I S IT E A L A F F H C CL N P I L Y A F L LL T S V S R G S S LK I L S K G K R G GH S S V S T E S EFormulationLyophilized powderFadotoxin Level<1 EU/µg, determined by LAL method.ReconsititutionIt is not recommended to reconstitute to a concentration less than 100 µg/mIStorage & StabilityStored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or recommended to freeze aliquots at -20°C or -80°C for extended storage.ShippingRoom temperature in continental US; may vary elsewhere.							
AppearanceLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% TrehalosEndotoxin Level<1 EU/µg, determined by LAL method.	AA Sequence		VTSDNVTEEM	GSGDVDSMKI	F		
ARK H H L F H H H SF Y I T L P F W A VD A V A N W Y F G NR L H L S V A D L LF V I T L P F W A VD A V A N W Y F G NT V N L Y S S V L IL A F I S L D R Y LA I V H A T N S Q RY V G V W I P A L LL T I P D F I F A NV S E A D D R Y I CV V F Q F Q H I M VG L I L P G I V I LS C Y C I I I S K LA L K T T V I L I LA F F A C W L P Y YI G I S I D S F I LE N T V H K W I S IT E A L A F F H C CL N P I L Y A F L GL T S V S R G S S LK I L S K G K R G GH S S V S T E S E SAppearanceLyophilized powderFormulationLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% TrehaloseEndotoxin Level<1 EU/µg, determined by LAL method.		NKIELDTIVS		GLVILVMGVO			
AppearanceLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% TrehaloseEndotoxin Level<1 EU/µg, determined by LAL method.ReconsititutionIt is not recommended to reconstitute to a concentration less than 100 µg/mL iStorage & StabilityStored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or - recommended to freeze aliquots at -20°C or -80°C for extended storage.							
AppearanceLyophilized powderFormulationLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% TrehaloseEndotoxin Level<1 EU/µg, determined by LAL method.ReconsititutionIt is not recommended to reconstitute to a concentration less than 100 µg/mL ir recommended to freeze aliquots at -20°C for extended storage.ShippingRoom temperature in continental US; may vary elsewhere.							
AppearanceLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% Trehalose,Endotoxin Level<1 EU/µg, determined by LAL method.ReconsititutionIt is not recommended to reconstitute to a concentration less than 100 µg/mL in Storage & StabilityStorage & StabilityStored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -2 recommended to freeze aliquots at -20°C for extended storage.ShippingRoom temperature in continental US; may vary elsewhere.		IVNLISSVLI		AIVHAINSQR			
A L K T T V I L I LA F F A C W L P Y YI G I S I D S F I LA L K T T V I L I LA F F A C W L P Y YI G I S I D S F I LE N T V H K W I S IT E A L A F F H C CL N P I L Y A F L GL T S V S R G S S LK I L S K G K R G GH S S V S T E S E SAppearanceLyophilized powderFormulationLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% Trehalose,Endotoxin Level<1 EU/µg, determined by LAL method.		YVGVWIPALL		VSEADDRYIC			
A L K T I V I L I LA F F A C W L P Y YI G I S I D S F I LE N T V H K W I S IT E A L A F F H C CL N P I L Y A F L GL T S V S R G S S LK I L S K G K R G GH S S V S T E S E SAppearanceLyophilized powderFormulationLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% Trehalose,Endotoxin Level<1 EU/µg, determined by LAL method.ReconsititutionIt is not recommended to reconstitute to a concentration less than 100 µg/mL in recommended to freeze aliquots at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -2 recommended to freeze aliquots at -20°C for extended storage.ShippingRoom temperature in continental US; may vary elsewhere.		V V F Q F Q H I M V	GLILPGIVIL	SCYCIIISKL			
ENTVHKWISITEALAFFHCCLNPILYAFLGLTSVSRGSSLKILSKGKRGGHSSVSTESESAppearanceLyophilized powderFormulationLyophilized from a 0.2 μm filtered solution of PBS, 0.05% EOS-12, 6% Trehalose,Endotoxin Level<1 EU/μg, determined by LAL method.		ALKTTVILIL	AFFACWLPYY	IGISIDSFIL			
AppearanceLyophilized powderFormulationLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% Trehalose, <1 EU/µg, determined by LAL method.ReconsititutionIt is not recommended to reconstitute to a concentration less than 100 µg/mL in Storage & StabilityStorage & StabilityStored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -2 recommended to freeze aliquots at -20°C for extended storage.ShippingRoom temperature in continental US; may vary elsewhere.		ENTVHKWISI	ТЕАLАFFHСС	LNPILYAFLG			
AppearanceLyophilized powderFormulationLyophilized from a 0.2 μm filtered solution of PBS, 0.05% EOS-12, 6% Trehalose, 		LTSVSRGSSL	KILSKGKRGG	HSSVSTESES			
AppearanceLyophilized powderFormulationLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% Trehalose, Compared StabilityEndotoxin Level<1 EU/µg, determined by LAL method.							
FormulationLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% Trehalose,Endotoxin Level<1 EU/µg, determined by LAL method.ReconsititutionIt is not recommended to reconstitute to a concentration less than 100 µg/mL inStorage & StabilityStored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -2ShippingRoom temperature in continental US; may vary elsewhere.	Appearance	I vonhilized nowder					
FormulationLyophilized from a 0.2 µm filtered solution of PBS, 0.05% EOS-12, 6% TrehaloseEndotoxin Level<1 EU/µg, determined by LAL method.	Appearance	Lyophilized powder					
Endotoxin Level <1 EU/µg, determined by LAL method.	Formulation	Lyophilized from a 0.2 um filtered solution of PBS 0.05% EQS-12.6% Trabalose .nH 7.4					
Endotoxin Level<1 EU/μg, determined by LAL method.	- officiation			570 E05 12, 070 Hendlose	۰ P		
Reconsititution It is not recommended to reconstitute to a concentration less than 100 µg/mL in Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C recommended to freeze aliquots at -20°C or -80°C for extended storage. Shipping Room temperature in continental US; may vary elsewhere.	Endotoxin Level	<1 EU/ug determined by	I AL method				
ReconsititutionIt is not recommended to reconstitute to a concentration less than 100 µg/mL in Storage & StabilityStorage & StabilityStored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or recommended to freeze aliquots at -20°C or -80°C for extended storage.ShippingRoom temperature in continental US; may vary elsewhere.	Endotoxin Level	<1 LO/μg, determined by	LAL Method.				
Storage & Stability Stored at -20°C for 2 years. After reconstitute to a concentration less than 100 µg/mL i Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or recommended to freeze aliquots at -20°C or -80°C for extended storage. Shipping Room temperature in continental US; may vary elsewhere.	Deconsititution						
Storage & StabilityStored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or recommended to freeze aliquots at -20°C or -80°C for extended storage.ShippingRoom temperature in continental US; may vary elsewhere.	Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH ₂ O.					
Storage & Stability Storage & Stability Storage & Stability recommended to freeze aliquots at -20°C or -80°C for extended storage. Shipping Room temperature in continental US; may vary elsewhere.	Chave as 0 Chability						
Shipping Room temperature in continental US; may vary elsewhere.	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					
Shipping Room temperature in continental US; may vary elsewhere.		recommended to freeze aliquots at -20°C or -80°C for extended storage.					
Shipping Room temperature in continental US; may vary elsewhere.							
	Shipping	Room temperature in continental US; may vary elsewhere.					

DESCRIPTION

Background

The CXCR4 Protein serves as a receptor for the C-X-C chemokine CXCL12/SDF-1, transmitting signals that increase

intracellular calcium ion levels and enhance MAPK1/MAPK3 activation. It is actively involved in the AKT signaling cascade and plays a crucial role in regulating cell migration, particularly during processes like wound healing. Additionally, CXCR4 acts as a receptor for extracellular ubiquitin, leading to elevated intracellular calcium ions and reduced cellular cAMP levels. It also binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory responses, including TNF secretion by monocytes. Beyond its immunological functions, CXCR4 plays essential roles in hematopoiesis, cardiac ventricular septum formation, vascularization of the gastrointestinal tract, and cerebellar development. In the central nervous system, it may mediate hippocampal-neuron survival. Furthermore, in the context of microbial infection, CXCR4 acts as a coreceptor, alongside CD4, for human immunodeficiency virus-1 (HIV-1) X4 isolates and serves as a primary receptor for certain HIV-2 isolates, promoting viral fusion.

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