

Product datasheet for TP721122XL

OriGene Technologies, Inc.

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IL8 (CXCL8) (NM_000584) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Human interleukin 8 (IL8)

Species: Human Expression Host: HEK293

Expression cDNA Clone

or AA Sequence:

Glu21-Ser99

Tag: C-His
Predicted MW: 10.1 kDa

Concentration: lot specific

Purity: >95% as determined by SDS-PAGE and Coomassie blue staining

Buffer: Provided lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM NaCl

Endotoxin: Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg)

Reconstitution Method: Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the

lyophilized protein in ddH2O. It is not recommended to reconstitute a concentration less than 100 μ g/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Storage: Store at -80°C.

Stability: Stable for at least 6 months from date of receipt under proper storage and handling

conditions.

RefSeq: NP 000575

Locus ID: 3576

UniProt ID: <u>P10145</u>, <u>A0A024RDA5</u>

RefSeq Size: 1666 Cytogenetics: 4q13.3 RefSeq ORF: 297

Synonyms: GCP-1; GCP1; IL8; LECT; LUCT; LYNAP; MDNCF; MONAP; NAF; NAP-1; NAP1; SCYB8





Summary:

The protein encoded by this gene is a member of the CXC chemokine family and is a major mediator of the inflammatory response. The encoded protein is commonly referred to as interleukin-8 (IL-8). IL-8 is secreted by mononuclear macrophages, neutrophils, eosinophils, T lymphocytes, epithelial cells, and fibroblasts. It functions as a chemotactic factor by guiding the neutrophils to the site of infection. Bacterial and viral products rapidly induce IL-8 expression. IL-8 also participates with other cytokines in the proinflammatory signaling cascade and plays a role in systemic inflammatory response syndrome (SIRS). This gene is believed to play a role in the pathogenesis of the lower respiratory tract infection bronchiolitis, a common respiratory tract disease caused by the respiratory syncytial virus (RSV). The overproduction of this proinflammatory protein is thought to cause the lung inflammation associated with csytic fibrosis. This proinflammatory protein is also suspected of playing a role in coronary artery disease and endothelial dysfunction. This protein is also secreted by tumor cells and promotes tumor migration, invasion, angiogenesis and metastasis. This chemokine is also a potent angiogenic factor. The binding of IL-8 to one of its receptors (IL-8RB/CXCR2) increases the permeability of blood vessels and increasing levels of IL-8 are positively correlated with increased severity of multiple disease outcomes (eg, sepsis). This gene and other members of the CXC chemokine gene family form a gene cluster in a region of chromosome 4q. [provided by RefSeq, May 2020]

Protein Families:

Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways:

Bladder cancer, Chemokine signaling pathway, Cytokine-cytokine receptor interaction, Epithelial cell signaling in Helicobacter pylori infection, NOD-like receptor signaling pathway, Pathways in cancer, RIG-I-like receptor signaling pathway, Toll-like receptor signaling pathway