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# Recombinant Human CXCL2 Protein(Trx Tag)

Catalog Number: PDEH100573

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### **Description**

**Species** Human

Source E.coli-derived Human CXCL2 protein Ala35-Asn107, with an N-terminal Trx

Calculated MW 27.9 kDa Observed MW 30 kDa Accession P19875

**Bio-activity** Not validated for activity

## **Properties**

**Purity** > 90% as determined by reducing SDS-PAGE.

Endotoxin < 10 EU/mg of the protein as determined by the LAL method

Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

This product is provided as lyophilized powder which is shipped with ice packs. Shipping Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Formulation

Mannitol.

Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

#### Data



SDS-PAGE analysis of Human CXCL2 proteins, 2µg/lane of Recombinant Human CXCL2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 30

KD

Background

# For Research Use Only

### Elabscience Bionovation Inc.



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Chemokine (C-X-C motif) ligand 2 (CXCL2) , also called macrophage inflammatory protein 2 (MIP-2) , Growth-regulated protein beta (Gro-beta) and Gro oncogene-2 (Gro-2) , is a small cytokine belonging to the CXC chemokine family. CXCL2/MIP-2 is selectively up-regulated in tolerance-conferring APCs and serves to recruit NKT cells to the splenic marginal zone , where they form clusters with APCs and T cells. In the absence of the high-affinity receptor for CXCL2/MIP-2 or in the presence of a blocking Ab to CXCL2/MIP-2 , peripheral tolerance is prevented , and Ag-specific T regulatory cells are not generated. CXCL2/MIP-2 is selectively up-regulated in tolerance-conferring APCs and serves to recruit NKT cells to the splenic marginal zone , where they form clusters with APCs and T cells. In the absence of the high-affinity receptor for MIP-2 (as in CXCR2-deficient mice) or in the presence of a blocking Ab to MIP-2 , peripheral tolerance is prevented , and Ag-specific T regulatory cells are not generated. Understanding the regulation of lymphocyte traffic during tolerance induction may lead to novel therapies for autoimmunity , graft acceptance , and tumor rejection. Several studies have implicated the CXCL2 chemokine as a mediator in the development of sepsis. CXCL2/MIP-2 also plays a major role in mediating the neutrophilic inflammatory response of the rodent lung to particles such as quartz , crocidolite asbestos , as well as high doses of other relative innocuous dusts such as titanium dioxide.

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