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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

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

°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.

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

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 ,  $2\mu g$ /lane of Recombinant Human CXCL2 proteins was resolved with SDS-PAGE under reducing conditions , showing bands at 30

Background

# Elabscience®

### Elabscience Biotechnology Co., Ltd.

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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.