

Recombinant Human CCL25 Protein(Sumo Tag)

Catalog Number: PDEH100520

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

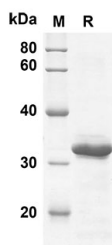
Description

Species	Human
Source	E.coli-derived Human CCL25 protein Gln24-Leu150, with an N-terminal Sumo
Calculated MW	26.8 kDa
Observed MW	34 kDa
Accession	O15444
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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized 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 CCL25 proteins, 2 µg/lane of Recombinant Human CCL25 proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 26.8 KD

Background

CCL25, also known as TECK (thymus-expressed chemokine), is a CC chemokine that regulates the trafficking of lymphocytes in the thymus and small intestine. Mature mouse CCL25 shares 40% and 81% amino acid sequence identity with an human and rat CCL25, respectively. CCL25 is produced by stromal cells in the thymus and epithelial cells of the small intestine, particularly the jejunum and ileum. It binds to and induces chemoattraction through CCR9, and both human and mouse proteins act on human CCR9. CCR9 is expressed on immature pre-T cells and thymocytes. CCL25 induces the homing of several lymphocyte populations to the small intestine, including Integrin alpha 4 beta 7+ gamma delta T cells, Integrin alpha E beta 7+ CD8+ T cells, and IgA-producing plasma cells. In cancer, functional CCR9 mediates the metastasis of melanoma cells to the small intestine, contributes to the CCL25-dependent migration and invasion of some breast carcinomas, and attracts mesenchymal stromal cells to CCL25-expressing multiple myelomas. CCL25 contributes to the severity of chronic inflammation in rheumatoid arthritis where it attracts CCR9+ monocytes and macrophages, in endometriosis where it promotes the invasiveness of stromal cells, and in atherosclerosis where it contributes to the accumulation of CCR9+ macrophages in arterial plaques.