

Product Data Sheet

MIP-5/CCL15 Protein, Human (68a.a, His)

Cat. No.: HY-P73812

Synonyms: MIP-5; CCL15; C-C motif chemokine 15; HCC-2; SCYA15; NCC3

Species: Human
Source: E. coli

Accession: Q16663 (S46-I113)

Gene ID: 6359

Molecular Weight: Approximately 10 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH ₂ O.
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 recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

CCL15, also known as macrophage inhibitory protein 5 (MIP-5), leukocyte chemokine 1 (Lkn-1) and human CC chemokine 2 (HCC-2), is a small cytokine belonging to the CC chemokine family, a cluster of chemokines located on human chromosome 17 with a gene sequence similar to CC motif chemokine ligand 5 (CCL5) and CC motif chemokine ligand 3 (CCL3). CCL15 can be expressed in certain leukocytes and macrophages in the liver, small intestine, colon, and lung^[1]. CCL15 acts as a chemoattractant for neutrophils, monocytes and lymphocytes and can bind to chemokine receptors CCR1 and CCR3, of which CCR3 is the major receptor for human eosinophils and plays an important role in the migration of monocytes, lymphocytes and neutrophils. Meanwhile, CCL15 plays an effector molecule role in the regulation of hematopoietic cells and host defense. Recombinant human CCL15 is also the most abundant chemokine in follicular thyroid cancer (FTC). CCL15 has been reported to be elevated in bronchoalveolar lavage fluid (BALF) from patients with stage III nodular disease and in peripheral blood from patients with severe persistent asthma, contributing to the severity and persistence of the disease by targeting its receptors (especially CCR1) in an autocrine manner^{[2][3]}.

REFERENCES

- [1]. Yasuo Shimizu, et al. CC-chemokine CCL15 expression and possible implications for the pathogenesis of IgE-related severe asthma. Mediators Inflamm. 2012;2012:475253.
- [2]. Ji-Sook Lee, et al. Leukotactin-1/CCL15 induces cell migration and differentiation of human eosinophilic leukemia EoL-1 cells through PKCdelta activation. Mol Biol Rep. 2010 Jun;37(5):2149-56.
- [3]. Feng-Jiao Huang, et al. Follicular thyroid carcinoma but not adenoma recruits tumor-associated macrophages by releasing CCL15. BMC Cancer. 2016 Feb 15;16:98.

Caution: Product has not been fully validated for medical applications. For research use only.

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