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Anti-CCL7/MCP-3 Antibody

Catalog # ABO11753

Product Information

Application	WB, E
Primary Accession	Q03366
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for C-C motif chemokine 7(CCL7) detection. Tested with WB, ELISA in Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	20306
Other Names	C-C motif chemokine 7, Intercrine/chemokine MARC, Monocyte chemoattractant protein 3, Monocyte chemotactic protein 3, MCP-3, Protein FIC, Small-inducible cytokine A7, Ccl7, Fic, Mcp3, Scya7
Calculated MW	10999
Application Details	Western blot, 0.1-0.5 □g/ml, Mouse, - ELISA , 0.1-0.5 □g/ml, Mouse
Subcellular Localization	Secreted.
Source	Eukaryota
Protein Name	C-C motif chemokine 7
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived mouse MCP3 recombinant protein (Position: Q24-P97). Mouse MCP3 shares 60% and 95% amino acid (aa) sequences identity with human and rat MCP3, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

Name	Ccl7
Synonyms	Fic, Mcp3, Scya7
Function	Chemotactic factor that plays an important role in immune regulation. Attracts monocytes, eosinophils, basophils, and T-cells to sites of inflammation or infection. Upon binding to various chemokine receptors including CCR1, CCR2, CCR3, and CCR5, facilitates immune cell migration by guiding them to infected tissues (PubMed:39805173). Interacts with CCR2 to facilitate the release of monocytes from the bone marrow into the bloodstream, maintaining monocyte homeostasis. In turn, monocytes recruited to inflamed or injured tissues can differentiate into macrophages or dendritic cells, which are essential for immune defense and tissue repair (PubMed:17364026). Through CCR1, contributes to macrophage polarization via NF-kappa-B activation which leads to the release of inflammatory factors (PubMed:39805173). In the trigeminal ganglion neurons, activates ERK via CCR2 and CCR3 to enhance neuronal excitability, which contributes to the maintenance of trigeminal neuropathic pain (PubMed:36998150). Additionally, modulates the early immune response in the skin, preventing pathogen dissemination while maintaining cutaneous immune control (PubMed:30671055).
Cellular Location	Secreted.

Background

Chemokine (C-C motif) ligand 7 (CCL7) is a small cytokine known as a chemokine that was previously called monocyte-specific chemokine 3 (MCP3). It belongs to the C-C chemokine family. By fluorescence in situ hybridization, MCP3 gene is mapped to chromosome 17q11.2-q12. MCP3 was identified as a physiologic substrate of gelatinase A. Cleaved MCP3 binds to CC-chemokine receptors-1, -2, and -3, but no longer induces calcium fluxes or promotes chemotaxis, and instead acts as a general chemokine antagonist that dampens inflammation, it has been found that matrix metalloproteinases are both effectors and regulators of the inflammatory response.

Images

Anti-MCP3 Picoband antibody, ABO11753-1.jpgAll lanes: Anti-MCP3(ABO11753) at 0.5ug/mlWB: Recombinant Mouse MCP3 Protein 0.5ngPredicted bind size: 36KDObserved bind size: 36KD