



20150116ML

Anti-Mouse CCL-5 (#5J42)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	103-M335
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat) immunized with mouse recombinant protein of CCL-5.

Target Background

Synonyms (Target):	Ccl5; SISd; Scya5; RANTES; TCP228; MuRantes
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CCL5, also known as RANTES (Regulated upon Activation, Normal T cell Expressed and presumably Secreted), is an 8 kDa βchemokine that plays a primary role in the inflammatory immune response by means of its ability to attract and activate leukocytes. Human and mouse RANTES exhibit cross-species activity on human and mouse cells (4). Mature mouse CCL5 shares 100% amino acid (aa) sequence identity with rat CCL5 and 75-88% with canine, cotton rat, feline, and human CCL5. CCL5 is secreted by many cell types at inflammatory sites, and it exerts a wide range of activities through the receptors CCR1, CCR3, CCR4, and CCR5. Inflammatory responses can be impaired by the sequestration of CCL5 by the cytomegalovirus protein US28. In humans, CCR5 binding to CCL5 inhibits the infectivity of R5 (M tropic) but not X4 (T tropic) strains of HIV. The two N-terminal residues of CCL5 can be removed by CD26/DPPIV, generating a protein that functions as a chemotaxis inhibitor and more effectively blocks M tropic HIV 1 infection of monocytes. Oligomerization of CCL5 on glycosaminoglycans is required for CCR1-mediated leukocyte adhesion and activation as well as CCL5's interaction with the chemokine CXCL4/PF4. The deposition of CCL5 on activated vascular endothelial cells is crucial for monocyte adhesion to damaged vasculature, but CCL5 oligomerization is not required for the extravasation of adherent leukocytes. CCL5 is upregulated in breast cancer and promotes tumor progression through the attraction of proinflammatory macrophages in addition to its actions on tumor cells, stromal cells, and the vasculature.

Database References Target

Protein RefSeq:	NP_038681.2
Uniprot ID:	P30882
mRNA RefSeq:	NM_013653.3

Product Specifications

Host	Rat
Reactivity against	Mouse
Clonality	Monoclonal Antibody
Clone	(#5J42)
Isotype	IgG2
Purification	Protein G/A chromatography
Antigen	recombinant mouse CCL-5
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks:

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

ELISA, IHC (F), N

Recommended usage:

ELISA: 1:500-2000

IHC (frozen): 1:50-300

Neutralization: Yes

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!