

#12199 Store at -20C

## CCR2 (D14H7) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	42	Rabbit IgG	#P41597	729230

### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity / Sensitivity

CCR2 (D14H7) Rabbit mAb recognizes endogenous levels of total CCR2 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly197 of human CCR2 protein.

### Background

CCR2 is a member of the "CC-branch" of chemokine G protein-coupled receptors that regulate monocyte chemotaxis and T cell migration/activation and drive inflammation in a number of pathological conditions (1). CCR2 is the receptor for several chemokines including MCP-1, MCP-3, and MCP-4 (2-5). CCR2 transduces signals through increases in intracellular calcium levels. It has two alternative isoforms, CCR2A and CCR2B, differing in their carboxy-terminal tails with CCR2B trafficking more efficiently to the membrane (2,6). CCR2 was originally identified in the THP-1 monocyte cell line, and its expression is decreased following differentiation into macrophages (7). Knockout studies demonstrate that CCR2 is a major regulator of macrophage trafficking (8-10). In addition, research studies have shown that CCR2 functions as an alternative coreceptor with CD4 for infection of some strains of HIV (11,12).

### Background References

1. Zhao, Q. (2010) *J Leukoc Biol* 88, 41-55.
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3. Franci, C. et al. (1995) *J Immunol* 154, 6511-7.
4. Yamagami, S. et al. (1994) *Biochem Biophys Res Commun* 202, 1156-62.
5. Combadiere, C. et al. (1995) *J Biol Chem* 270, 29671-5.
6. Wong, L.M. et al. (1997) *J Biol Chem* 272, 1038-45.
7. Denholm, E.M. and Stankus, G.P. (1995) *Cytokine* 7, 436-40.
8. Kuziel, W.A. et al. (1997) *Proc Natl Acad Sci U S A* 94, 12053-8.
9. Boring, L. et al. (1997) *J Clin Invest* 100, 2552-61.
10. Kurihara, T. et al. (1997) *J Exp Med* 186, 1757-62.
11. Rucker, J. et al. (1996) *Cell* 87, 437-46.
12. Frade, J.M. et al. (1997) *J Clin Invest* 100, 497-502.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**WB:** Western Blotting

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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