#12199 Store at -20°C

CCR2 (D14H7) Rabbit mAb

☑ 100 µl
(10 western blots)

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New 01/13

For Research Use Only. Not For Use In Diagnostic Procedures.

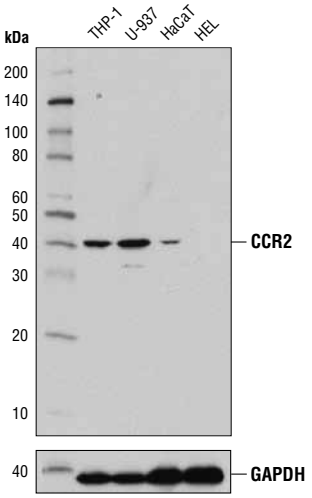
Entrez-Gene ID #729230
Swiss-Prot Acc. #P41597

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP Endogenous	H	42 kDa	Rabbit IgG**

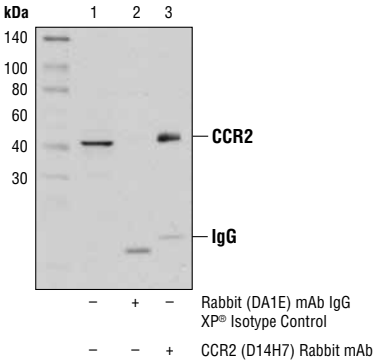
Background: CCR2 is a member of the "CC-branch" of chemokine G protein-coupled receptors that regulate monocyte chemotaxis and T cell migration/activation and drive inflammation in a number of pathological conditions (1). CCR2 is the receptor for several chemokines including MCP-1, MCP-3, and MCP-4 (2-5). 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).

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.



Western blot analysis of extracts from various cell lines using CCR2 (D14H7) Rabbit mAb (upper) or GAPDH (D16H11) XP® Rabbit mAb #5174 (lower). HEL cells are reported to be negative for CCR2 expression (2).



Immunoprecipitation of CCR2 from THP-1 cell extracts using Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 2) or CCR2 (D14H7) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using CCR2 (D14H7) Rabbit mAb.

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

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.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:100

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

Background References:

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(2) Charo, I.F. et al. (1994) *Proc Natl Acad Sci U S A* 91, 2752-6.
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(7) Denholm, E.M. and Stankus, G.P. (1995) *Cytokine* 7, 436-40.
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(12) Frade, J.M. et al. (1997) *J Clin Invest* 100, 497-502.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide
Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **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 **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.