

## Basic Information

<b>Product Name</b>	Anti-CCR2 Antibody (Clone#8C4)	
<b>Gene Name</b>	CCR2	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG2b	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, IHC, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E. coli-derived human CCR2 recombinant protein (Position: M1-F125). Human CCR2 shares 76.8% amino acid (aa) sequence identity with both mouse and rat CCR2.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	protein G purified.	
<b>Observed MW</b>	50 kDa	
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

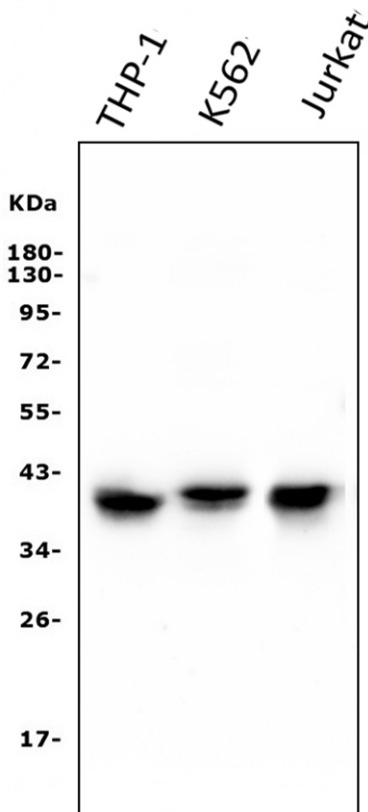
## Background Information

C-C chemokine receptor type 2 (CCR2 or CD192 (cluster of differentiation 192) is a protein that in humans is encoded by the CCR2 gene. It is mapped to 3p21.31. The protein encoded by this gene is a receptor for monocyte chemoattractant protein-1, a chemokine which specifically mediates monocyte chemotaxis. Monocyte chemoattractant protein-1 is involved in monocyte infiltration in inflammatory diseases such as rheumatoid arthritis as well as in the inflammatory response against tumors. The encoded protein mediates agonist-dependent calcium mobilization and inhibition of adenylyl cyclase. This protein can also be a coreceptor with CD4 for HIV-1 infection.

## Reference

Anti-CCR2 Antibody (Clone#8C4)被引用在1文献中。

## Selected Validation Data



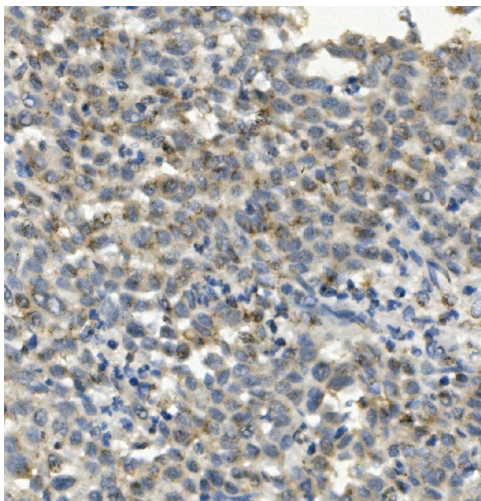
Western blot analysis of CCR2 using anti-CCR2 antibody (M00158-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human THP-1 whole cell lysates,

Lane 2: human K562 whole cell lysates,

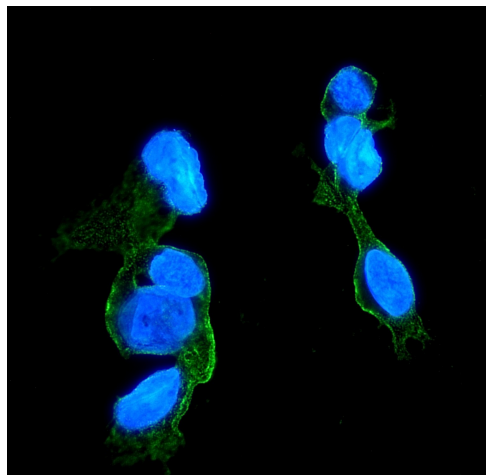
Lane 3: human Jurkat whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-CCR2 antigen affinity purified monoclonal antibody (M00158-1) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CCR2 at approximately 50 kDa. The expected band size for CCR2 is at 42 kDa.



IHC analysis of CCR2 using anti-CCR2 antibody (M00158-1).

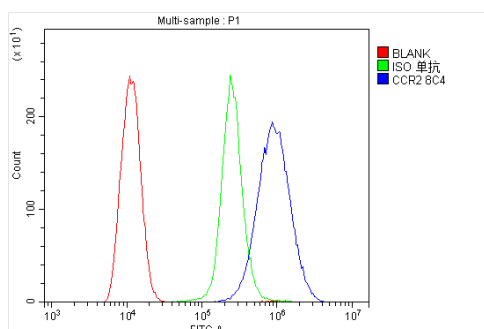
CCR2 was detected in a paraffin-embedded section of human liver cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-CCR2 Antibody (M00158-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of CCR2 using anti-CCR2 antibody (M00158-1).

CCR2 was detected in an immunocytochemical section of HepG2 cells.

The section was incubated with mouse anti-CCR2 Antibody (M00158-1) at a dilution of 1:100. Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of THP-1 cells using anti-CCR2 antibody (M00158-1).

Overlay histogram showing THP-1 cells stained with M00158-1 (Blue line).

The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with mouse anti-CCR2 Antibody (M00158-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.