

# CD44 monoclonal antibody, clone 5C10

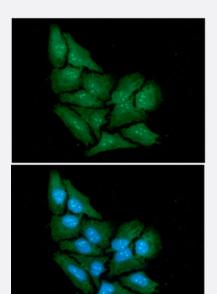
Catalog # MAB2034 Size 100 uL

## **Applications**



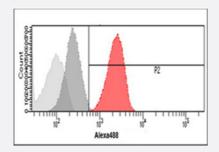
## Western Blot (Recombinant protein)

Western blot analysis of Recombinant human CD44 protein.



### **Immunofluorescence**

Immunofluorescence analysis of HeLa cells. The cell was stained with CD44 monoclonal antibody, clone 5C10 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



### Flow Cytometry

Flow cytometric analysis of HeLa cells. The cell was stained with CD44 monoclonal antibody, clone 5C10 at 2-5 ug for 1x106cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).





Specification	
Product Description	Mouse monoclonal antibody raised against partial recombinant CD44.
lmmunogen	Recombinant protein corresponding to amino acids 21-145 of human CD44.
Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Isotype	lgG2b, kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Recommend Usage	ELISA Flow Cytometry Immunocytochemistry (1:100) Immunofluorescence (1:100) Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

# Applications

Western Blot (Recombinant protein)

Western blot analysis of Recombinant human CD44 protein.

- Immunocytochemistry
- Immunofluorescence

Immunofluorescence analysis of HeLa cells. The cell was stained with CD44 monoclonal antibody, clone 5C10 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

Enzyme-linked Immunoabsorbent Assay



#### Flow Cytometry

Flow cytometric analysis of HeLa cells. The cell was stained with CD44 monoclonal antibody, clone 5C10 at 2-5 ug for 1x10<sup>6</sup>cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).

Gene Info — CD44	
Entrez GenelD	960
Protein Accession#	P16070
Gene Name	CD44
Gene Alias	CDW44, CSPG8, ECMR-III, HCELL, IN, LHR, MC56, MDU2, MDU3, MGC10468, MIC4, MUTCH -I, Pgp1
Gene Description	CD44 molecule (Indian blood group)
Omim ID	107269
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other I igands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). This protein participates in a wide variety of cellular functions including lymphocyte activation, recirculation and ho ming, hematopoiesis, and tumor metastasis. Transcripts for this gene undergo complex alternative splicing that results in many functionally distinct isoforms, however, the full length nature of some of these variants has not been determined. Alternative splicing is the basis for the structural and functional diversity of this protein, and may be related to tumor metastasis. [provided by RefSeq
Other Designations	CD44 antigen CD44 antigen (homing function and Indian blood group system) CDW44 antigen G P90 lymphocyte homing/adhesion receptor Hermes antigen antigen gp90 homing receptor cell ad hesion molecule cell surface glycoprotein CD44 chondroitin sulfate proteogl

## **Publication Reference**

#### The liberation of CD44.

Cichy J, Puré E.

The Journal of Cell Biology 2003 Jun; 161(5):839.

Application: Flow Cyt, Func, Human, Mouse, Mammalian cells



• The normal structure and function of CD44 and its role in neoplasia.

Sneath RJ, Mangham DC.

Molecular Pathology 1998 Aug; 51(4):191.

## Pathway

- ECM-receptor interaction
- Hematopoietic cell lineage

#### Disease

- Arthritis
- Breast Neoplasms
- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Craniofacial Abnormalities
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Heart Defects
- Hepatitis B
- Kidney Failure
- Mouth Abnormalities
- Neoplasm Recurrence
- Neoplasms
- Ovarian Neoplasms