

# Human CD46 antibody

Catalog Number: ATGA0326

## PRODUCT INFORMATION

---

**Catalog number**

ATGA0326

**Clone No.**

AT2G9

**Product type**

Monoclonal Antibody

**UnitProt No.**

P15529

**NCBI Accession No.**

NP\_758860

**Alternative Names**

Membrane cofactor protein isoform 14, AHuS2, MCP, MIC10, TLX, TRA2.10

## PRODUCT SPECIFICATION

---

**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

Recombinant human CD46 (35-313aa) purified from E. coli

**Isotype**

IgG2a kappa

**Purification Note**

By protein-A affinity chromatography

**Application**

ELISA, WB, ICC/IF, IHC, FACS

**Usage**

The antibody has been tested by ELISA, Western blot, ICC/IF, FACS and IHC analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

# Human CD46 antibody

Catalog Number: ATGA0326

## Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

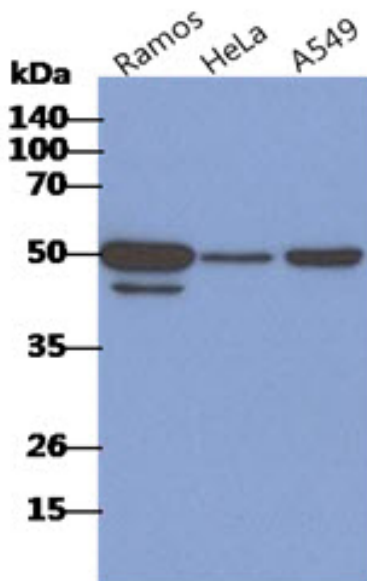
Membrane Cofactor Protein (CD46) is a type 1 membrane protein that plays an important inhibitory role in the complement system. CD46 regulates the complement cascade by inhibiting C3b and C4b deposited on self tissue. This protein is a cofactor that binds to C3b and C4b, allowing their degradation by a plasma serine protease called factor I. This function resides in the complement control protein repeats (CCPs), with CCP1-4 essential for regulation. CD46 is implicated in the development and/or progression of selected cancer types.

### General References

- Liszewski M.K., et al. (1991) *Annu Rev Immunol* 9: 431-455.
- Riley-Varqas R.C., et al. (2004) *Trends Immunol* 25(9): 496-503.
- Studebaker A.W., et al. (2010) *Neuro Oncol* 12: 1034-1042.

## DATA

### Western blot analysis (WB)

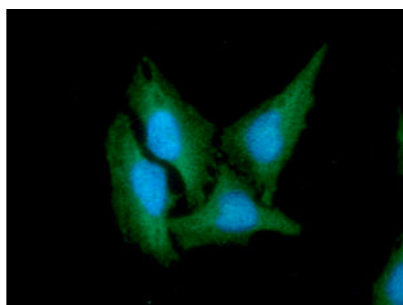


The cell lysates of Ramos, HeLa and A549 (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human CD46 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

### Immunocytochemistry/Immunofluorescence (ICC/IF)

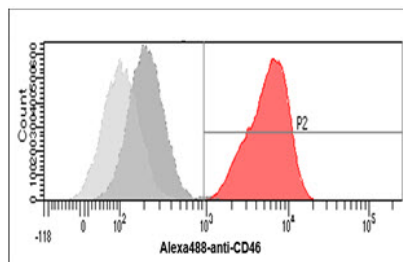
# Human CD46 antibody

Catalog Number: ATGA0326



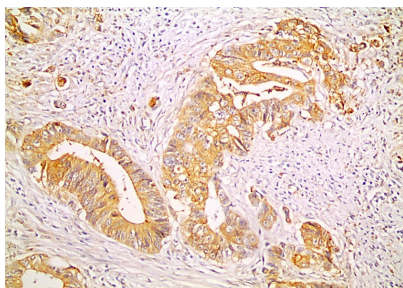
ICC/IF analysis of CD46 in HeLa cells. The cell was stained with ATGA0326 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

## Flow cytometry (FACS)



Flow cytometry analysis of CD46 in PBMC cells. The cell was stained with ATGA0326 at 2-5ug for  $1 \times 10^6$  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).

## Immunohistochemistry (IHC)



Paraffin embedded sections of human colorectal cancer tissue were incubated with anti-human CD46 (1:100) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine(DAB)