

CD46 (H-294): sc-9098

BACKGROUND

CD46, also called membrane cofactor protein (MCP), is a transmembrane glycoprotein that exists as a non-disulfide-linked dimer. CD46 regulates the complement cascade by inhibiting C3b and C4b deposited on self tissue. CD46 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 CCPs 2-4 essential for regulation. CD46 is widely distributed on thymocytes, T cells, B cells, monocytes, granulocytes, NK cells, platelets, endothelial cells, epithelial cells, fibroblasts, placenta and sperm, but not on erythrocytes. CD46 is the major high affinity receptor for measles virus and human herpesvirus. Mouse cells ubiquitously express CRRY, which is a functional orthologue of human decay-accelerating factor (DAF; CD55) and membrane cofactor protein (MCP; CD46).

CHROMOSOMAL LOCATION

Genetic locus: CD46 (human) mapping to 1q32.2; Cd46 (mouse) mapping to 1 H6.

SOURCE

CD46 (H-294) is a rabbit polyclonal antibody raised against amino acids 35-328 of CD46 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CD46 (H-294) is recommended for detection of CD46 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD46 siRNA (h): sc-35004, CD46 siRNA (m): sc-35005, CD46 shRNA Plasmid (h): sc-35004-SH, CD46 shRNA Plasmid (m): sc-35005-SH, CD46 shRNA (h) Lentiviral Particles: sc-35004-V and CD46 shRNA (m) Lentiviral Particles: sc-35005-V.

Molecular Weight of CD46: 56-66 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Caki-1 cell lysate: sc-2224 or CCRF-CEM cell lysate: sc-2225.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

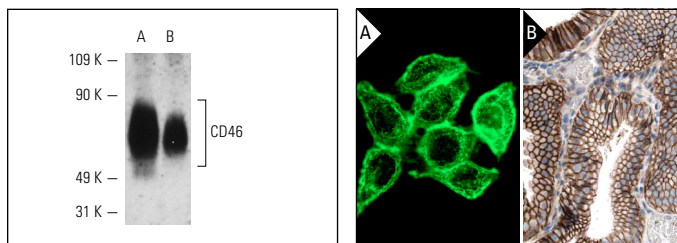
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



CD46 (H-294): sc-9098. Western blot analysis of CD46 expression in Caki-1 (A) and CCRF-CEM (B) whole cell lysates.

CD46 (H-294): sc-9098. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

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- Larochelle, N., et al. 2008. Downregulation of CD46 during muscle differentiation: implications for gene transfer to human skeletal muscle using group B adenoviruses. *Hum. Gene Ther.* 19: 133-142.
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- Galanis, E., et al. 2010. Phase I trial of intraperitoneal administration of an oncolytic measles virus strain engineered to express carcinoembryonic antigen for recurrent ovarian cancer. *Cancer Res.* 70: 875-882.
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- Saffarzadeh, M., et al. 2012. Neutrophil extracellular traps directly induce epithelial and endothelial cell death: a predominant role of histones. *PLoS ONE* 7: e32366.



Try **CD46 (C-10): sc-166159** or **CD46 (E4.3): sc-7634**, our highly recommended monoclonal alternatives to CD46 (H-294). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **CD46 (C-10): sc-166159**.