

CD93 (P-15): sc-22994

BACKGROUND

The CD93 antigen is a 652 amino acid cell-surface glycoprotein expressed by monocytes, neutrophils, platelets, microglia, and endothelial cells. CD93 was originally thought to be a putative receptor for the complement component C1q, a serum glycoprotein which plays an integral role in the activation of the classical pathway in response to immune complexes. As a result, in the literature the CD93 gene product has also been referred to as C1QR1 and C1qRp as well as MXRA4 (matrix-remodeling-associated protein 4). Recent studies suggest that the CD93 antigen plays a role in intercellular adhesion and in clearance of apoptotic cells. CD93 is a heavily O-glycosylated, type I transmembrane protein consisting of an N-terminal domain with homology to C-type lectin domains, a tandem array of EGF-like domains, a single transmembrane domain and a short cytoplasmic tail.

REFERENCES

1. Malhotra, R., et al. 1993. Structure and homology of human C1q receptor (collectin receptor). *Immunology* 78: 341-348.
2. Nepomuceno, R.R. and Tenner, A.J. 1998. C1qRP, the C1q receptor that enhances phagocytosis, is detected specifically in human cells of myeloid lineage, endothelial cells, and platelets. *J. Immunol.* 160: 1929-1935.
3. Nepomuceno, R.R., et al. 1999. C1qRP is a heavily O-glycosylated cell surface protein involved in the regulation of phagocytic activity. *J. Immunol.* 162: 3583-3589.
4. Danet, G.H., et al. 2002. C1qRp defines a new human stem cell population with hematopoietic and hepatic potential. *Proc. Natl. Acad. Sci. USA* 99: 10441-10445.
5. McGreal, E.P., et al. 2002. Human C1qRp is identical with CD93 and the mNI-11 antigen but does not bind C1q. *J. Immunol.* 168: 5222-5232.
6. Steinberger, P., et al. 2002. Identification of human CD93 as the phagocytic C1q receptor (C1qRp) by expression cloning. *J. Leukoc. Biol.* 71: 133-140.

CHROMOSOMAL LOCATION

Genetic locus: CD93 (human) mapping to 20p11.21.

SOURCE

CD93 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CD93 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.

Blocking peptide available for competition studies, sc-22994 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CD93 (P-15) is recommended for detection of CD93 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD93 siRNA (h): sc-105157, CD93 shRNA Plasmid (h): sc-105157-SH and CD93 shRNA (h) Lentiviral Particles: sc-105157-V.

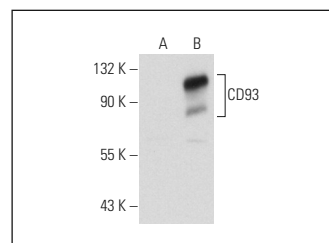
Molecular Weight of CD93: 126 kDa.

Positive Controls: CD93 (h): 293T Lysate: sc-114650.

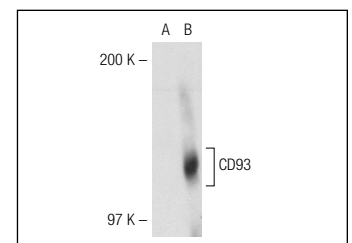
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CD93 (P-15): sc-22994. Western blot analysis of CD93 expression in non-transfected: sc-117752 (A) and human CD93 transfected: sc-175374 (B) 293T whole cell lysates.



CD93 (P-15): sc-22994. Western blot analysis of CD93 expression in non-transfected: sc-117752 (A) and human CD93 transfected: sc-114650 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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