SANTA CRUZ BIOTECHNOLOGY, INC.

CD93 (B-1): sc-365172

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.

CHROMOSOMAL LOCATION

Genetic locus: CD93 (human) mapping to 20p11.21; Cd93 (mouse) mapping to 2 G3.

SOURCE

CD93 (B-1) is a mouse monoclonal antibody raised against amino acids 463-652 of CD93 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD93 (B-1) is available conjugated to agarose (sc-365172 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365172 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365172 PE), fluorescein (sc-365172 FITC), Alexa Fluor® 488 (sc-365172 AF488), Alexa Fluor® 546 (sc-365172 AF546), Alexa Fluor® 594 (sc-365172 AF594) or Alexa Fluor® 647 (sc-365172 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365172 AF680) or Alexa Fluor® 790 (sc-365172 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

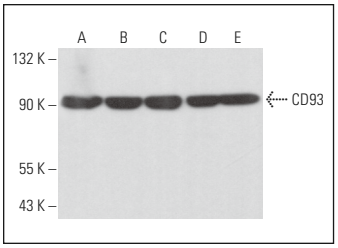
CD93 (B-1) is recommended for detection of CD93 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) 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 siRNA (m): sc-106980, CD93 shRNA Plasmid (h): sc-105157-SH, CD93 shRNA Plasmid (m): sc-106980-SH, CD93 shRNA (h) Lentiviral Particles: sc-105157-V and CD93 shRNA (m) Lentiviral Particles: sc-106980-V.

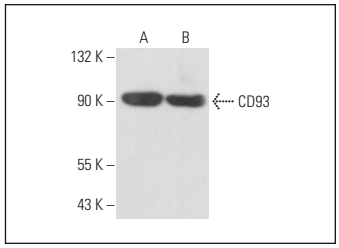
Molecular Weight of CD93: 126 kDa.

Positive Controls: HeLa whole cell lysates: sc-2200, HUV-EC-C whole cell lysate: sc-364180 or THP-1 cell lysate: sc-2238.

DATA



CD93 (B-1): sc-365172. Western blot analysis of CD93 expression in THP-1 (**A**), RAW 264.7 (**B**), AMJ2-C8 (**C**), L6 (**D**) and A-10 (**E**) whole cell lysates.



CD93 (B-1): sc-365172. Western blot analysis of CD93 expression in HeLa (**A**) and HUV-EC-C (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Fantone, S., et al. 2022. CD93 a potential player in cytotrophoblast and endothelial cell migration. Cell Tissue Res. 387: 123-130.
2. Jiang, Q., et al. 2023. CD93 overexpresses in liver hepatocellular carcinoma and represents a potential immunotherapy target. Front. Immunol. 14: 1158360.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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