

C1QBP (H-9): sc-271200

BACKGROUND

The human complement subcomponent C1q associates with C1r and C1s in order to yield the first component of the serum complement system (SCS). The SCS contains over 30 glycoproteins that influence physiological mechanisms of the body in response to immune complex (the classical pathway), carbohydrate (the lectin pathway) or bacterial (alternative pathway) initiation. C1q binding protein (C1QBP), also designated gC1q-R, p32 (p33) or HABP1 (hyaluronan-binding protein 1), is known to bind the globular heads of C1q molecules and inhibit C1 activation. C1QBP has been described as a complement receptor for C1q on B cells, neutrophils and mast cells. The C1QBP protein may form homodimers. C1QBP is expressed in vascular endothelial cells and has been found to be a multifunctional protein interacting with elements of complement, coagulation and kinin systems. In addition, C1QBP is a subunit of pre-mRNA splicing factor SF2/ASF.

CHROMOSOMAL LOCATION

Genetic locus: C1QBP (human) mapping to 17p13.2; C1qbp (mouse) mapping to 11 B4.

SOURCE

C1QBP (H-9) is a mouse monoclonal antibody raised against amino acids 1-282 representing full length C1QBP of human origin.

PRODUCT

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

C1QBP (H-9) is available conjugated to agarose (sc-271200 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271200 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271200 PE), fluorescein (sc-271200 FITC), Alexa Fluor® 488 (sc-271200 AF488), Alexa Fluor® 546 (sc-271200 AF546), Alexa Fluor® 594 (sc-271200 AF594) or Alexa Fluor® 647 (sc-271200 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271200 AF680) or Alexa Fluor® 790 (sc-271200 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

C1QBP (H-9) is recommended for detection of C1QBP 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), 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 C1QBP siRNA (h): sc-42880, C1QBP siRNA (m): sc-42881, C1QBP shRNA Plasmid (h): sc-42880-SH, C1QBP shRNA Plasmid (m): sc-42881-SH, C1QBP shRNA (h) Lentiviral Particles: sc-42880-V and C1QBP shRNA (m) Lentiviral Particles: sc-42881-V.

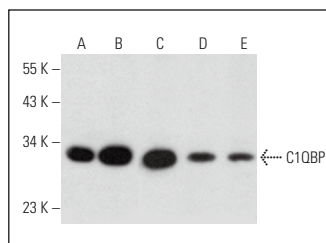
Molecular Weight of C1QBP: 33 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, MCF7 whole cell lysate: sc-2206 or NIH/3T3 whole cell lysate: sc-2210.

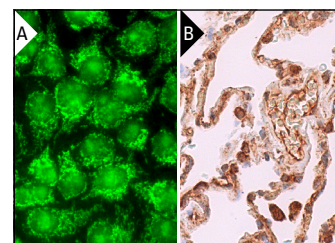
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



C1QBP (H-9): sc-271200. Western blot analysis of C1QBP expression in MCF7 (A), K-562 (B), NIH/3T3 (C), L8 (D) and RAT2 (E) whole cell lysates.



C1QBP (H-9): sc-271200. Immunofluorescence staining of formalin-fixed HeLa cells showing mitochondrial and membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing cytoplasmic staining of pneumocytes and macrophages (B).

SELECT PRODUCT CITATIONS

- Wang, Y., et al. 2014. p32 is a novel target for viral protein ICP34.5 of herpes simplex virus type 1 and facilitates viral nuclear egress. *J. Biol. Chem.* 289: 35795-35805.
- Wu, S., et al. 2016. Herpes simplex virus 1 induces phosphorylation and reorganization of Lamin A/C through the γ134.5 protein that facilitates nuclear egress. *J. Virol.* 90: 10414-10422.
- Summer, S., et al. 2020. YBEY is an essential biogenesis factor for mitochondrial ribosomes. *Nucleic Acids Res.* 48: 9762-9786.
- Ma, L., et al. 2023. Two RNA-binding proteins mediate the sorting of miR223 from mitochondria into exosomes. *Elife* 12: e85878.

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.

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