SANTA CRUZ BIOTECHNOLOGY, INC.

C1QBP (60.11): sc-23884

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (60.11) is a mouse monoclonal antibody raised against recombinant C1QBP corresponding to amino acids 74-282 of mature C1QBP.

PRODUCT

Each vial contains 200 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for biological studies, sc-23884 L, 200 µg/0.1 ml.

C1QBP (60.11) is available conjugated to either phycoerythrin (sc-23884 PE) or fluorescein (sc-23884 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

C1QBP (60.11) is recommended for detection of mature form of C1QBP 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)] and flow cytometry (1 µg per 1 x 10^6 cells); blocks C1q/C1QBP interaction.

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: HL-60 whole cell lysate: sc-2209, Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

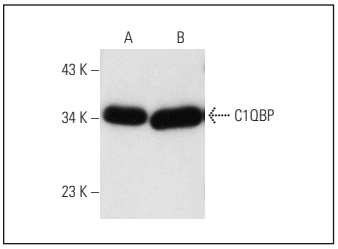
STORAGE

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

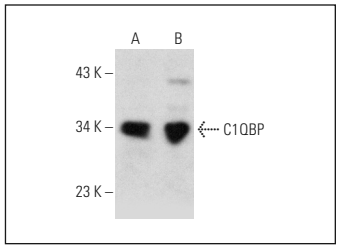
RESEARCH USE

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

DATA



C1QBP (60.11): sc-23884. Western blot analysis of C1QBP expression in HL-60 (**A**) and Hep G2 (**B**) whole cell lysates.



C1QBP (60.11): sc-23884. Western blot analysis of C1QBP expression in MCF7 (**A**) and HeLa (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Lood, C., et al. 2009. C1q inhibits immune complex-induced interferon-α production in plasmacytoid dendritic cells: a novel link between C1q deficiency and systemic lupus erythematosus pathogenesis. Arthritis Rheum. 60: 3081-3090.
2. Tahtouh, M., et al. 2012. Interaction of HmC1q with leech microglial cells: involvement of C1qBP-related molecule in the induction of cell chemotaxis. J. Neuroinflammation 9: 37.
3. Zhang, X., et al. 2013. Interactome analysis reveals that C1QBP (complement component 1, q subcomponent binding protein) is associated with cancer cell chemotaxis and metastasis. Mol. Cell. Proteomics 12: 3199-3209.
4. Su, W.P., et al. 2020. Therapeutic Zfra4-10 or WWOX7-21 peptide induces complex formation of WWOX with selective protein targets in organs that leads to cancer suppression and spleen cytotoxic memory Z cell activation *in vivo*. Cancers 12: 2189.
5. Rousso-Noori, L., et al. 2021. P32-specific CAR T cells with dual antitumor and antiangiogenic therapeutic potential in gliomas. Nat. Commun. 12: 3615.

PROTOCOLS

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