

C1QBP (h2): 293T Lysate: sc-171633

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.

REFERENCES

1. Krainer, A.R., Mayeda, A., Kozak, D. and Binns, G. 1991. Functional expression of cloned human splicing factor SF2: homology to RNA-binding proteins, U1 70K, and *Drosophila* splicing regulators. *Cell* 66: 383-394.
2. Deb, T.B. and Datta, K. 1996. Molecular cloning of human fibroblast hyaluronin acid-binding protein confirms its identity with P-32, a protein co-purified with splicing factor SF2. Hyaluronic acid-binding protein as P-32 protein, co-purified with splicing factor SF2. *J. Biol. Chem.* 271: 2206-2212.
3. Guo, N., Weremowicz, S., Lynch, N., Lim, B.L., Schwaeble, W., Peerschke, E.I., Morton, C.C., Reid, K.B., Ghebrehwet, B. and Sastry, K.N. 1997. Assignment of C1QBP encoding the C1q globular domain binding protein (gC1q-R) to human chromosome 17 band p13.3 by *in situ* hybridization. *Cytogenet. Cell Genet.* 77: 283-284.
4. Dedio, J., Jahnen-Dechent, W., Bachmann, M. and Muller-Esterl, W. 1998. The multiligand-binding protein gC1q-R, putative C1q receptor, is a mitochondrial protein. *J. Immunol.* 160: 3534-3542.
5. Dedio, J., Renne, T., Weisser, M. and Muller-Esterl, W. 1999. Subcellular targeting of multiligand-binding protein gC1qR. *Immunopharmacology* 45: 1-5.
6. Tye, A.J., Ghebrehwet, B., Guo, N., Sastry, K.N., Chow, B.K., Peerschke, E.I. and Lim, B.L. 2001. The human gC1qR/p32 gene, C1qBP. Genomic organization and promoter analysis. *J. Biol. Chem.* 276: 17069-17075.
7. Danet, G.H., Luongo, J.L., Butler, G., Lu, M.M., Tenner, A.J., Simon, M.C. and Bonnet, D.A. 2002. C1qRp defines a new human stem cell population with hematopoietic and hepatic potential. *Proc. Natl. Acad. Sci. USA* 99: 10441-10445.
8. Yin, W., Ghebrehwet, B., Weksler, B. and Peerschke, E.I. 2007. Classical pathway complement activation on human endothelial cells. *Mol. Immunol.* 44: 2228-2234.

CHROMOSOMAL LOCATION

Genetic locus: C1QBP (human) mapping to 17p13.2.

RESEARCH USE

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

PRODUCT

C1QBP (h2): 293T Lysate represents a lysate of human C1QBP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

C1QBP (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive C1QBP antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

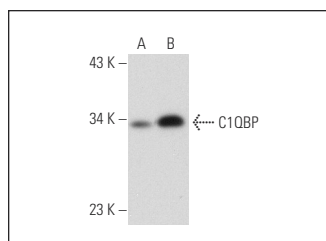
C1QBP (74.5.2): sc-23885 is recommended as a positive control antibody for Western Blot analysis of enhanced human C1QBP expression in C1QBP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



C1QBP (74.5.2): sc-23885. Western blot analysis of C1QBP expression in non-transfected: sc-117752 (A) and human C1QBP transfected: sc-171633 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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