

C1qL1 (G-15): sc-139462

BACKGROUND

C1q is part of the C1 enzyme complex, which activates the serum complement system. The residues of the globular domain in C1q share homology with several other secreted and membrane-bound collagen or collagen-like proteins, including pre-cerebellin and collagen types VIII and X, as well as the human and mouse genes encoding Apm1/BPB80 and AdipoQ/ACRP30, respectively. These various C1q-related proteins are found in adipose serum, corneal endothelium, chondrocytes and cerebral Purkinje cells. C1qL1 (complement component 1, q subcomponent-like 1), also known as CRF or C1QRF, is a polypeptide with a hydrophobic signal sequence, a collagenous region and a globular domain at the carboxy terminus, which shares homology to the C1q globular domain. C1qL1 transcripts are most abundant in areas of the nervous system that are associated with motor function, including cerebral Purkinje cells, the pons, the accessory olivary nucleus, and the red nucleus. The similarity of mouse C1qL1 to human C1qL1 suggests a conserved and important role for the protein. In humans, the gene encoding C1qL1 maps to chromosome 17q21.31.

REFERENCES

1. Yamaguchi, M., et al. 1989. The cloning and sequencing of $\alpha 1(VIII)$ collagen cDNAs demonstrate that type VIII collagen is a short chain collagen that contains triple-helical and carboxy-terminal non-triple-helical domains similar to those of type X collagen. *J. Biol. Chem.* 264: 16022-16029.
2. Seller, G.C., et al. 1991. Characterization and organization of the genes encoding the A-, B-, and C-chains of human complement subcomponent C1q. *Biochem. J.* 274: 481-490.
3. Brass, A., et al. 1992. The fibrillar collagen, collagen VIII, collagen X and the C1q complement proteins share a similar domain in their C-terminal non-collagenous regions. *FEBS Lett.* 303: 126-128.
4. Scherer, P.E., et al. 1995. A novel serum protein similar to C1q, produced exclusively in adipocytes. *J. Biol. Chem.* 270: 26746-26749.
5. Berube, N.G., et al. 1999. Cloning and characterization of CRG, a novel C1q-related factor, expressed in areas of the brain involved in motor function. *Mol. Brain Res.* 63: 233-240.

CHROMOSOMAL LOCATION

Genetic locus: C1QL1 (human) mapping to 17q21.31; C1ql1 (mouse) mapping to 11 E1.

SOURCE

C1qL1 (G-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of C1qL1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139462 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C1qL1 (G-15) is recommended for detection of C1qL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with C1qL2, C1qL3 or C1qL4.

C1qL1 (G-15) is also recommended for detection of C1qL1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for C1qL1 siRNA (h): sc-40372, C1qL1 siRNA (m): sc-40373, C1qL1 shRNA Plasmid (h): sc-40372-SH, C1qL1 shRNA Plasmid (m): sc-40373-SH, C1qL1 shRNA (h) Lentiviral Particles: sc-40372-V and C1qL1 shRNA (m) Lentiviral Particles: sc-40373-V.

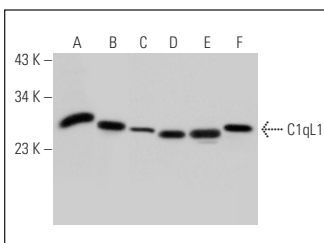
Molecular Weight of C1qL1: 26 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or mouse spleen extract: sc-2391.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



C1qL1 (G-15): sc-139462. Western blot analysis of C1qL1 expression in HeLa (A), Jurkat (B), Hep G2 (C), NTERA-2 cl.D1 (D) and HT-29 (E) whole cell lysates and mouse spleen tissue extract (F).

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.