

C1q-A (m): 293T Lysate: sc-125073

BACKGROUND

C1q, a subcomponent of the classical complement pathway, is composed of nine subunits that mediate classical complement activation and thereby play an important role in the immune response. Six of these subunits are disulfide-linked dimers of chains A and B, while three of these subunits, designated C1q-A through C1q-C, are disulfide-linked dimers of chain C. The presence of receptors for C1q on effector cells modulates its activity, which may be antibody-dependent or independent. Macrophages are the primary source of C1q, while anti-inflammatory drugs as well as cytokines differentially regulate expression of the mRNA as well as the protein. However, its ability to modulate the interaction of platelets with collagen and immune complexes suggests C1q influences homeostasis as well as other immune activities, and perhaps thrombotic complications resulting from immune injury. Defects in C1q-A, C1q-B and C1q-C cause inactivation of the classical pathway, leading to a rare genetic disorder characterized by lupus-like symptoms.

REFERENCES

1. Peerschke, E.I. and Ghebrehiwet, B. 1998. Platelet receptors for the complement component C1q: implications for hemostasis and thrombosis. *Immunobiology* 199: 239-249.
2. Hiepe, F., Pfüller, B., Wolbart, K., Bruns, A., Leinenbach, H.P., Hepper, M., Schössler, W. and Otto, V. 1999. C1q: a multifunctional ligand for a new immunoadsorption treatment. *Ther. Apher.* 3: 246-251.
3. Kishore, U. and Reid, K.B. 2000. C1q: structure, function, and receptors. *Immunopharmacology* 49: 159-170.
4. Faust, D. and Loos, M. 2002. *In vitro* modulation of C1q mRNA expression and secretion by interleukin-1, interleukin-6, and interferon- γ in resident and stimulated murine peritoneal macrophages. *Immunobiology* 206: 368-376.
5. Faust, D., Akoglu, B., Zgouras, D., Scheuermann, E.H., Milovic, V. and Stein, J. 2002. Anti-inflammatory drugs modulate C1q secretion in human peritoneal macrophages *in vitro*. *Biochem. Pharmacol.* 64: 457-462.
6. Petry, F. and Loos, M. 2005. Common silent mutations in all types of hereditary complement C1q deficiencies. *Immunogenetics* 57: 566-571.

CHROMOSOMAL LOCATION

Genetic locus: C1qa (mouse) mapping to 4 D3.

PRODUCT

C1q-A (m): 293T Lysate represents a lysate of mouse C1q-A transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

C1q-A (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive C1q-A antibodies. Recommended use: 10-20 μ l per lane.

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

RESEARCH USE

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

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.