SANTA CRUZ BIOTECHNOLOGY, INC.

C1qL2 (P-12): sc-139465

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

C1qL2 (complement C1q-like protein 2), also known as CTRP10 or C1QTNF10, is a 287 amino acid secreted protein that contains one C1q domain and one collagen-like domain. C1qL2 belongs to a large family of multimeric proteins with a signature globular domain homologous to C1QA. These proteins also share structural homology with TNF family members. The gene that encodes C1qL2 consists of approximately 2,653 bases and maps to human chromosome 2q14.2. Consisting of 237 million bases, chromosome 2 encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is due to mutations in the ALMS1 gene.

REFERENCES

1. Baldini, A., et al. 1993. An alphoid DNA sequence conserved in all human and great ape chromosomes: evidence for ancient centromeric sequences at human chromosomal regions 2q21 and 9q13. Hum. Genet. 90: 577-583.
2. Patel, S.B., et al. 1998. Mapping a gene involved in regulating dietary cholesterol absorption. The sitosterolemia locus is found at chromosome 2p21. J. Clin. Invest. 102: 1041-1044.
3. Zumsteg, U., et al. 2000. Alstrom syndrome: confirmation of linkage to chromosome 2p12-13 and phenotypic heterogeneity in three affected sibs. J. Med. Genet. 37: E8.
4. Shulenin, S., et al. 2001. An ATP-binding cassette gene (ABCG5) from the ABCG (White) gene subfamily maps to human chromosome 2p21 in the region of the sitosterolemia locus. Cytogenet. Cell Genet. 92: 204-208.
5. Hearn, T., et al. 2002. Mutation of ALMS1, a large gene with a tandem repeat encoding 47 amino acids, causes Alström syndrome. Nat. Genet. 31: 79-83.
6. Kelsell, D.P., et al. 2005. Mutations in ABCA12 underlie the severe congenital skin disease harlequin ichthyosis. Am. J. Hum. Genet. 76: 794-803.
7. Horvath, J.E., et al. 2005. Punctuated duplication seeding events during the evolution of human chromosome 2p11. Genome Res. 15: 914-927.

CHROMOSOMAL LOCATION

Genetic locus: C1QL2 (human) mapping to 2q14.2.

SOURCE

C1qL2 (P-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of C1qL2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-139465 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C1qL2 (P-12) is recommended for detection of C1qL2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg 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 C1qL1, C1qL3 or C1qL4.

Suitable for use as control antibody for C1qL2 siRNA (h): sc-105154, C1qL2 shRNA Plasmid (h): sc-105154-SH and C1qL2 shRNA (h) Lentiviral Particles: sc-105154-V.

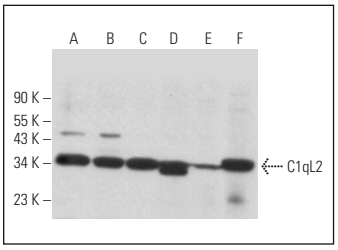
Molecular Weight of C1qL2: 29 kDa.

Positive Controls: human spleen extract: sc-363779, human liver extract: sc-363766 or A549 cell lysate: sc-2413.

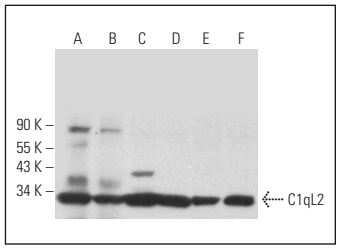
RECOMMENDED SECONDARY REAGENTS

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



C1qL2 (P-12): sc-139465. Western blot analysis of C1qL2 expression in MEG-01 (**A**), HUV-EC-C (**B**), HeLa (**C**), Jurkat (**D**) and K-562 (**E**) whole cell lysates and human spleen tissue extract (**F**).



C1qL2 (P-12): sc-139465. Western blot analysis of C1qL2 expression in human fetal heart (**A**) and human liver (**B**) tissue extracts and A549 (**C**), MCF7 (**D**), NTERA-2 cl.D1 (**E**) and SW480 (**F**) whole cell lysates.

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.

PROTOCOLS

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