

QPCTL (D-3): sc-515718



The Power to Question

BACKGROUND

QPCTL (glutamyl-peptide cyclotransferase-like protein) is a 382 amino acid single-pass membrane protein that belongs to the glutamyl-peptide cyclotransferase family. The QPCTL protein binds one zinc ion per subunit. The QPCTL gene is conserved in chimpanzee, canine, bovine, mouse, rat, zebrafish, *S. cerevisiae*, *K. lactis*, *E. gossypii*, *M. grisea* and *N. crassa*, and maps to human chromosome 19q13.32. Chromosome 19 consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19.

REFERENCES

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3. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. *Gene* 241: 45-50.
4. Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. *Cytogenet. Genome Res.* 97: 171-178.
5. Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. *Eur. J. Immunogenet.* 29: 287-291.
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7. Brocke-Heidrich, K., et al. 2006. Bcl3 is induced by IL-6 via Stat3 binding to intronic enhancer HS4 and represses its own transcription. *Oncogene* 25: 7297-7304.
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CHROMOSOMAL LOCATION

Genetic locus: QPCTL (human) mapping to 19q13.32; Qpctl (mouse) mapping to 7 A3.

SOURCE

QPCTL (D-3) is a mouse monoclonal antibody raised against amino acids 276-325 mapping near the C-terminus of QPCTL of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

QPCTL (D-3) is recommended for detection of QPCTL of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for QPCTL siRNA (h): sc-97698, QPCTL siRNA (m): sc-152612, QPCTL shRNA Plasmid (h): sc-97698-SH, QPCTL shRNA Plasmid (m): sc-152612-SH, QPCTL shRNA (h) Lentiviral Particles: sc-97698-V and QPCTL shRNA (m) Lentiviral Particles: sc-152612-V.

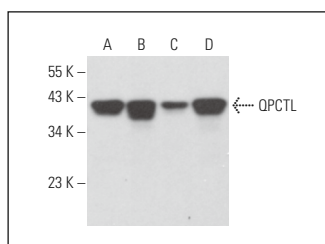
Molecular Weight of QPCTL: 43 kDa.

Positive Controls: NCI-H460 whole cell lysate: sc-364235, U-937 cell lysate: sc-2239 or COLO 320DM cell lysate: sc-2226.

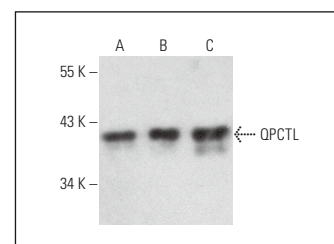
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



QPCTL (D-3): sc-515718. Western blot analysis of QPCTL expression in NCI-H460 (A), NCI-H1299 (B), COLO 205 (C) and SW480 (D) whole cell lysates.



QPCTL (D-3): sc-515718. Western blot analysis of QPCTL expression in NCI-H460 (A), COLO 320DM (B) and U-937 (C) 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.