

# QPCTL (G-17): sc-243904

## BACKGROUND

QPCTL (glutaminyl-peptide cyclotransferase-like protein) is a 382 amino acid single-pass membrane protein that belongs to the glutaminyl-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 $\alpha$  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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## CHROMOSOMAL LOCATION

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

## SOURCE

QPCTL (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of QPCTL of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243904 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

QPCTL (G-17) is recommended for detection of QPCTL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

QPCTL (G-17) is also recommended for detection of QPCTL in additional species, including equine, canine and porcine.

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.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.