## BACKGROUND

POLC1 (PO-loop repeat-containing protein 1) is a 271 amino acid protein encoded by a gene located on human chromosome 18. Encoding over 300 genes, chromosome 18 contains about 76 million bases. Trisomy 18, or Edwards syndrome, is the second most common trisomy after Downs syndrome. Symptoms of Edwards syndrome include low birth weight, a variety of physical development defects, heart deformations and breathing difficulty. Translocation between chromosome 18 and 14 is the most common translocation in cancers, and occurs in follicular lymphomas. Niemann-Pick disease, hereditary hemorrhagic telangiectasia and erythropoietic protoporphyria are associated with chromosome 18. The TGFb modulators, Smad2, Smad4 and Smad7 are encoded by chromosome 18.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PQLC1 (human) mapping to 18q23; Pqlc1 (mouse) mapping to 18 E3.

## SOURCE

POLC1 (Y-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N -terminus of POLC1 of human origin.

## STORAGE

Store at $4^{\circ} \mathrm{C}, ~ * * D O$ 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.

## PRODUCT

Each vial contains $100 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-85107 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## APPLICATIONS

PQLC1 (Y-12) is recommended for detection of POLC1 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).
Suitable for use as control antibody for POLC1 siRNA (h): sc-76210, PQLC1 siRNA (m): sc-152431, POLC1 shRNA Plasmid (h): sc-76210-SH, POLC1 shRNA Plasmid (m): sc-152431-SH, PQLC1 shRNA (h) Lentiviral Particles: sc-76210-V and POLC1 shRNA (m) Lentiviral Particles: sc-152431-V.
Molecular Weight of POLC1: 30 kDa .
Positive Controls: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

## 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 MarkerTM ${ }^{\text {TM }}$ compatible goat antirabbit 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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:1001:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## PROTOCOLS

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

