**BACKGROUND**

PELO (pelota homolog), also known as CGI-17 or PRO1770, is a 385 amino acid nuclear and cytoplasmic protein that belongs to the eukaryotic release factor 1 family and the pelota subfamily. Evolutionary conserved, PELO may be involved in the regulation of cell proliferation and stem cell self-renewal, and is suggested to be required for normal chromosome segregation during cell division and genomic stability. PELO may possess ribonuclease activity and has the ability to recognize stalled ribosomes, thereby triggering endonucleolytic cleavage of mRNA, a mechanism that releases non-functional ribosomes and degrades damaged mRNAs. PELO is ubiquitously expressed and utilizes divalent metal cations as cofactors. PELO may be essential for spermatogenesis, cell cycle control and in meiotic cell division. PELO is encoded by a gene located on human chromosome 5q11.2.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: PELO (human) mapping to 5q11.2; Pelo (mouse) mapping to 13 D2.2.

**SOURCE**

PELO (G-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 311-331 within an internal region of PELO of human origin.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

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

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-514484 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

PELO (G-4) is recommended for detection of PELO of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 PELO siRNA (h): sc-91932, PELO siRNA (m): sc-152161, PELO shRNA Plasmid (h): sc-91932 SH, PELO shRNA Plasmid (m): sc-152161-SH, PELO shRNA (h) Lentiviral Particles: sc-91932-V and PELO shRNA (m) Lentiviral Particles: sc-152161-V.

Molecular Weight of PELO: 43 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or A-375 cell lysate: sc-3811.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blotting 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Hard-set Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

**RESEARCH USE**

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