

ZFPL1 (L-22): sc-102173



The Power to Question

BACKGROUND

Zinc finger protein-like 1 (ZFPL1), also known as zinc finger protein MCG4, is a 310 amino acid single-pass membrane protein with 2 zinc fingers at the N-terminus, the second of which is likely a RING domain. The RING domain, which is a 40-60 amino acid, cysteine-rich domain that binds 2 atoms of zinc, plays a key role in the ubiquitination pathway. The presence of zinc finger-like and leucine zipper-like domains in ZFPL1 suggests a role in DNA binding and transcriptional regulation. ZFP1 is widely expressed in the Golgi apparatus and is involved in maintaining Golgi structure and regulating the rate of cargo transport.

REFERENCES

- Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. *New Biol.* 2: 363-374.
- Abbrink, M., et al. 1995. Isolation of cDNA clones for 42 different Kruppel-related zinc finger proteins expressed in the human monoblast cell line U-937. *DNA Cell Biol.* 14: 125-136.
- Guru, S.C., et al. 1997. A transcript map for the 2.8-Mb region containing the multiple endocrine neoplasia type 1 locus. *Genome Res.* 7: 725-735.
- Höppener, J.W., et al. 1998. A putative human zinc-finger gene (ZFPL1) on 11q13, highly conserved in the mouse and expressed in exocrine pancreas. The European Consortium on MEN 1. *Genomics* 50: 251-259.
- Chiu, C.F., et al. 2008. ZFPL1, a novel ring finger protein required for *cis*-Golgi integrity and efficient ER-to-Golgi transport. *EMBO J.* 27: 934-947.
- Scheper, J., et al. 2008. Analysis of electrostatic contributions to the selectivity of interactions between RING-finger domains and ubiquitin-conjugating enzymes. *Proteins* 74: 92-103.

CHROMOSOMAL LOCATION

Genetic locus: ZFPL1 (human) mapping to 11q13.1; Zfp1 (mouse) mapping to 19 A.

SOURCE

ZFPL1 (L-22) is a purified rabbit polyclonal antibody raised against ZFPL1 of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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 or our catalog for detailed protocols and support products.

APPLICATIONS

ZFPL1 (L-22) is recommended for detection of ZFPL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (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 ZFPL1 siRNA (h): sc-96938, ZFPL1 siRNA (m): sc-155597, ZFPL1 shRNA Plasmid (h): sc-96938-SH, ZFPL1 shRNA Plasmid (m): sc-155597-SH, ZFPL1 shRNA (h) Lentiviral Particles: sc-96938-V and ZFPL1 shRNA (m) Lentiviral Particles: sc-155597-V.

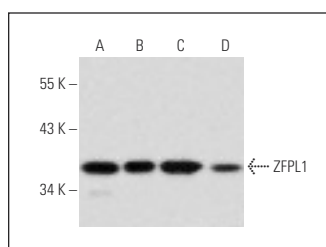
Molecular Weight of ZFPL1: 40 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

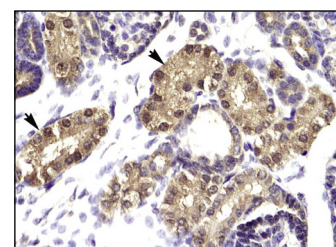
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ZFPL1 (L-22): sc-102173. Western blot analysis of ZFPL1 expression in Hep G2 (A), HeLa (B), and Jurkat (C) nuclear extracts and mouse liver tissue extract (D).



ZFPL1 (L-22): sc-102173. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining.

RESEARCH USE

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