SANTA CRUZ BIOTECHNOLOGY, INC.

LZP (G-16): sc-163050



BACKGROUND

The epidermal growth factor (EGF) repeat-containing proteins constitute an expanding family of proteins that are involved in several cellular activities, such as blood coagulation, fibrinolysis, cell adhesion and neural and vertebrate development. LZP (liver-specific zona pellucida domain-containing protein), also known as OIT3 (oncoprotein-induced transcript 3 protein), is a 545 amino acid protein that localizes to the nuclear envelope and contains one ZP domain and one EGF-like domain. Expressed specifically in liver tissue, LZP is thought to be involved in hepatocellular function and development and is downregulated in hepatocellular carcinoma, suggesting an additional role in tumor suppression. Multiple isoforms of LZP exist due to alternative splicing events.

REFERENCES

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- 2. Xu, Z.G., et al. 2003. A novel liver-specific zona pellucida domain containing protein that is expressed rarely in hepatocellular carcinoma. Hepatology 38: 735-744.
- 3. Xu, Z.G., et al. 2004. Identification of LZP gene from Mus musculus and Rattus norvegicus coding for a novel liver-specific ZP domain-containing secretory protein. DNA Seq. 15: 81-87.
- 4. Yang, H., et al. 2004. Identification and characterization of D8C, a novel domain present in liver-specific LZP, uromodulin and alvcoprotein 2, mutated in familial juvenile hyperuricaemic nephropathy. FEBS Lett. 578: 236-238.
- 5. Tan, M.G., et al. 2004. Cloning and identification of hepatocellular carcinoma down-regulated mitochondrial carrier protein, a novel liver-specific uncoupling protein. J. Biol. Chem. 279: 45235-45244.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609330. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 7. Shen, H.L., et al. 2009. Liver-specific ZP domain-containing protein (LZP) as a new partner of Tamm-Horsfall protein harbors on renal tubules. Mol. Cell. Biochem. 321: 73-83.

CHROMOSOMAL LOCATION

Genetic locus: OIT3 (human) mapping to 10q22.1; Oit3 (mouse) mapping to 10 B4.

SOURCE

LZP (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LZP of human origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163050 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LZP (G-16) is recommended for detection of LZP 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).

LZP (G-16) is also recommended for detection of LZP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LZP siRNA (h): sc-90538, LZP siRNA (m): sc-149198, LZP shRNA Plasmid (h): sc-90538-SH, LZP shRNA Plasmid (m): sc-149198-SH, LZP shRNA (h) Lentiviral Particles: sc-90538-V and LZP shRNA (m) Lentiviral Particles: sc-149198-V.

Molecular Weight of LZP: 60 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[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 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™ 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try LZP (66CT25.7.1): sc-130807, our highly recommended monoclonal alternative to LZP (G-16).