

LZP (66CT25.7.1): sc-130807

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

1. Appella, E., et al. 1988. Structure and function of epidermal growth factor-like regions in proteins. *FEBS Lett.* 231: 1-4.
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 glycoprotein 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.

SOURCE

LZP (66CT25.7.1) is a mouse monoclonal antibody raised against recombinant LZP of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

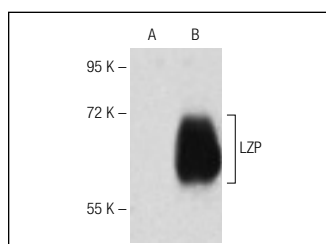
LZP (66CT25.7.1) is recommended for detection of LZP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

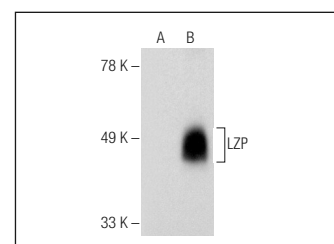
Molecular Weight of LZP: 60 kDa.

Positive Controls: LZP (h): 293T Lysate: sc-373074.

DATA



LZP (66CT25.7.1): sc-130807. Western blot analysis of LZP expression in non-transfected (A) and human LZP transfected (B) 293 whole cell lysates.



LZP (66CT25.7.1): sc-130807. Western blot analysis of LZP expression in non-transfected: sc-117752 (A) and human LZP transfected: sc-373074 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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