

# LZP (E-14): sc-163049

## 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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- 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.
- 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.
- 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.
- 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.
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## CHROMOSOMAL LOCATION

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

## SOURCE

LZP (E-14) 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163049 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

LZP (E-14) 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), 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).

LZP (E-14) is also recommended for detection of LZP in additional species, including equine, canine, bovine, porcine and avian.

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.

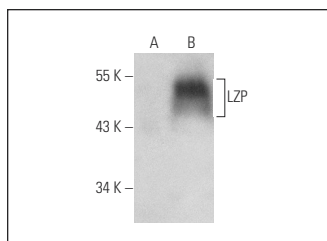
Molecular Weight of LZP: 60 kDa.

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

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



LZP (E-14): sc-163049. 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.

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Try **LZP (66CT25.7.1): sc-130807**, our highly recommended monoclonal alternative to LZP (E-14).