

### Product Information

**Size:**

50ul

**Reactivity:**

Human, Mouse

**Source:**

Rabbit

**Isotype:**

IgG

**Applications:**

ELISA, WB, IHC

**Recommended dilutions:**

ELISA:1:2000-1:5000, WB:1:500-1:2000,  
IHC:1:25-1:100

**Protein Background:**

Transcription factor that is the main target of insulin signaling and regulates metabolic homeostasis in response to oxidative stress. Binds to the insulin response element (IRE) with consensus sequence 5'-TT[G/A]TTTGG-3' and the related Daf-16 family binding element (DBE) with consensus sequence 5'-TT[G/A]TTTAC-3'. Activity suppressed by insulin. Main regulator of redox balance and osteoblast numbers and controls bone mass. Orchestrates the endocrine function of the skeleton in regulating glucose metabolism. Acts synergistically with ATF4 to suppress osteocalcin/BGLAP activity, increasing glucose levels and triggering glucose intolerance and insulin insensitivity. Also suppresses the transcriptional activity of RUNX2, an upstream activator of osteocalcin/BGLAP. In hepatocytes, promotes gluconeogenesis by acting together with PPARGC1A and CEBPA to activate the expression of genes such as IGFBP1, G6PC and PCK1. Important regulator of cell death acting downstream of CDK1, PKB/AKT1 and SKT4/MST1. Promotes neural cell death.

**Gene ID:**

LONP1

**Uniprot**

P36776

**Synonyms:**

lon peptidase 1, mitochondrial

**Immunogen:**

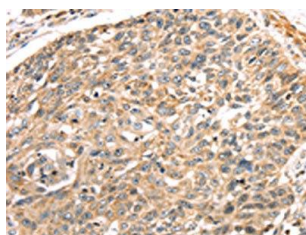
Synthetic peptide of human LONP1.

**Storage:**

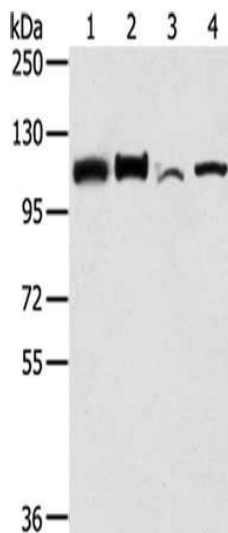
-20&deg; C, pH7.4 PBS, 0.05% NaN3, 40% Glycerol

## Product Images

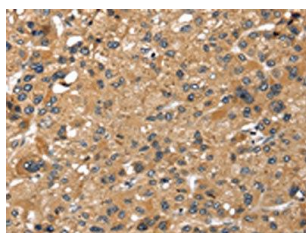
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The image on the left is immunohistochemistry of paraffin-embedded Human lung cancer tissue using PACO19950(LONP1 Antibody) at dilution 1/25, on the right is treated with synthetic peptide. (Original magnification: x—200).



Gel: 6%SDS-PAGE, Lysate: 40 &mu; g, Lane 1-4: Hela cells, HepG2 cells, NIH/3T3 cells, A431 cells, Primary antibody: PACO19950(LONP1 Antibody) at dilution 1/250 dilution, Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution, Exposure time: 30 seconds.



The image on the left is immunohistochemistry of paraffin-embedded Human liver cancer tissue using PACO19950(LONP1 Antibody) at dilution 1/25, on the right is treated with synthetic peptide. (Original magnification: x—200).