SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-Prohibitin antibody

Catalog Number: SL1449R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Prohibitin
Immunogen:	KLH conjugated synthetic peptide derived from human Prohibitin: 171-272/272
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 IHC-P=1:100-500 IHC-F=1:100-500 ICC/IF=1:100-500 IF=1:100-500 Flow-Cyt=2ug/test （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Mouse,Rat(predicted:Horse,Dog)
Predicted MW.:	30kDa
Subcellular Location:	cytoplasmic Mitochondrion
Background:	This gene is evolutionarily conserved, and its product is proposed to play a role in human cellular senescence and tumor suppression. Antiproliferative activity is reported to be localized to the 3' UTR, which is proposed to function as a trans-acting regulatory RNA. Several pseudogenes of this gene have been identified. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013] **Function:** Prohibitin inhibits DNA synthesis. It has a role in regulating proliferation. As yet it is unclear if the protein or the mRNA exhibits this effect. May play a role in regulating mitochondrial respiration activity and in

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	aging. **Subunit:** Interacts with PHB2. Interacts with STOML2. **Subcellular Location:** Mitochondrion inner membrane. **Tissue Specificity:** Widely expressed in different tissues. **Similarity:** Belongs to the prohibitin family. **Database links:** **Entrez Gene:** 5245 Human **Entrez Gene:** 18673 Mouse **Entrez Gene:** 25344 Rat Omim: 176705 Human **SwissProt:** P35232 Human **SwissProt:** P67778 Mouse **SwissProt:** P67779 Rat **Unigene:** 514303 Human **Unigene:** 263862 Mouse **Unigene:** 29754 Rat Prohibitin(phb)The gene is an effective tumor suppressor gene widely distributed in various biological cells of different species. The product it encodes, Prohibitin (PHB) protein, has a conserved structure and exists both on the inner mitochondrial membrane, where it acts as a molecular chaperone, and in the nucleus, where it exerts negative transcriptional regulation. Therefore, it plays important regulatory roles in many aspects such as cell metabolism, growth, differentiation, aging, and apoptosis, and may be related to the occurrence of certain tumors and degenerative diseases.

[VALIDATION IMAGES]

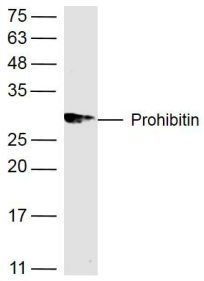


Figure 1. Sample: Heart(Mouse) Lysate at 40 ug Primary: Anti-Prohibitin (SL1449R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 30 kD Observed band size: 30 kD

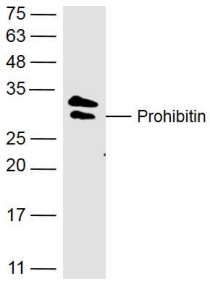


Figure 2. Sample: A431(Human) Cell Lysate at 40 ug Primary: Anti-Prohibitin (SL1449R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 30 kD Observed band size: 30 kD

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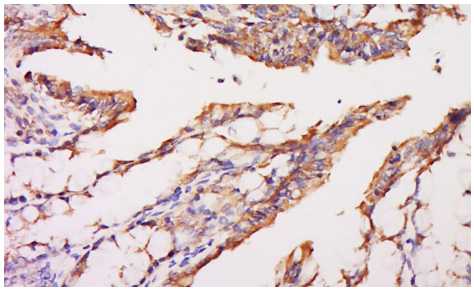


Figure 3. Tissue/cell: Rat intestine tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-Prohibitin Polyclonal Antibody, Unconjugated(SL1449R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

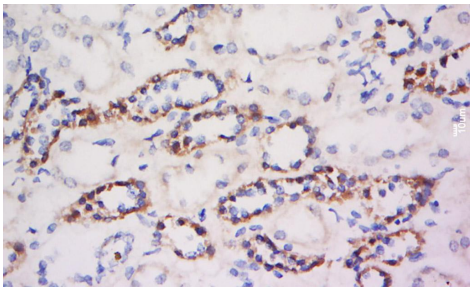


Figure 4. Tissue/cell: Human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-Prohibitin Polyclonal Antibody, Unconjugated(SL1449R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

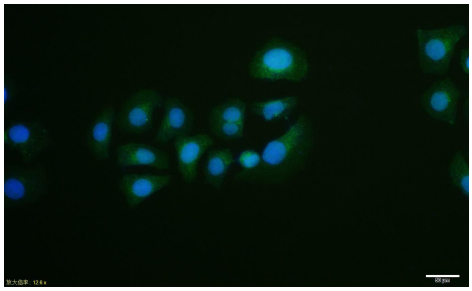


Figure 5. HepG2 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Prohibitin) polyclonal Antibody, Unconjugated (SL1449R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei

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