

Rabbit Anti-P73 antibody

SL1346R

Product Name:	P73
Chinese Name:	P73Tumour抑制基因抗体
Alias:	p53 like transcription factor; p53 Related Protein; p73; TP 73; TP73; Tumor Protein p73; p53-like transcription factor; p53-related protein; P73 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	70kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse P73 protein:501-631/631
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	P73 protein is a structural and functional homologue of p53, a tumor suppressor gene. In this study, The p73 protein, p19ras, by the yeast two-hybrid screening method. Alternative splicing of the proto-oncogene H-ras pre-mRNA has led to two distinct transcripts, Ras proteins are known to be small membrane-localized guanine nucleotide-binding proteins. However, unlike other Ras proteins, p19ras is localized in the nucleus and the cytosol and its interaction with P73 protein occurred exclusively in the nucleus.

Oncogenic MDM2 (mouse double minutes 2) is a known repressor of p73 transcriptional activity. In this study, when p19ras was bound to MDM2, it further inhibited the association of MDM2 to the p73 protein. Therefore, this study presents a novel pathway of Ras signaling that occurs in the nucleus, involving p19ras and p73.

Function:

Participates in the apoptotic response to DNA damage. Isoforms containing the transactivation domain are pro-apoptotic, isoforms lacking the domain are anti-apoptotic and block the function of p53 and transactivating p73 isoforms. May be a tumor suppressor protein. [COFACTOR] Binds 1 zinc ion per subunit

Subunit:

Found in a complex with p53/TP53 and CABLES1. The C-terminal oligomerization domain binds to the ABL1 tyrosine kinase SH3 domain. Interacts with HECW2. Isoform Beta interacts homotypically and with p53/TP53, whereas isoform Alpha does not. Isoform Gamma interacts homotypically and with all p73 isoforms. Isoform Delta interacts with isoform Gamma, isoform Alpha, and homotypically. Isoforms Alpha and Beta interact with HIPK2. Isoform Alpha interacts with RANBP9. Isoform Beta interacts with WWOX. Interacts (via SAM domain) with FBXO45 (via B30.2/SPRY domain). Interacts with YAP1 (phosphorylated form). Interacts with HCK (via SH3 domain); this inhibits TP73 activity and degradation.

Subcellular Location:

Nucleus. Cytoplasm. Note=Accumulates in the nucleus in response to DNA damage.

Tissue Specificity:

Expressed in striatal neurons of patients with Huntington disease (at protein level). Brain, kidney, placenta, colon, heart, liver, spleen, skeletal muscle, prostate, thymus and pancreas. Highly expressed in fetal tissue.

Post-translational modifications:

Isoform alpha (but not isoform beta) is sumoylated on Lys-627, which potentiates proteasomal degradation but does not affect transcriptional activity. Phosphorylation by PLK1 and PLK3 inhibits the transcription regulator activity and pro-apoptotic function. Higher levels of phosphorylation seen in the brain from patients with Huntington disease.

Polyubiquitinated by RCHY1/PIRH2; leading to its degradation by the proteasome.

Similarity:

Belongs to the p53 family.

Contains 1 SAM (sterile alpha motif) domain.

SWISS:

O9JJP2

Gene ID:

22062

Database links:

Entrez Gene: 7161Human

Entrez Gene: 22062 Mouse

Entrez Gene: 362675Rat

Omim: 601990Human

SwissProt: O15350Human

SwissProt: Q9JJP2Mouse

Unigene: 697294Human

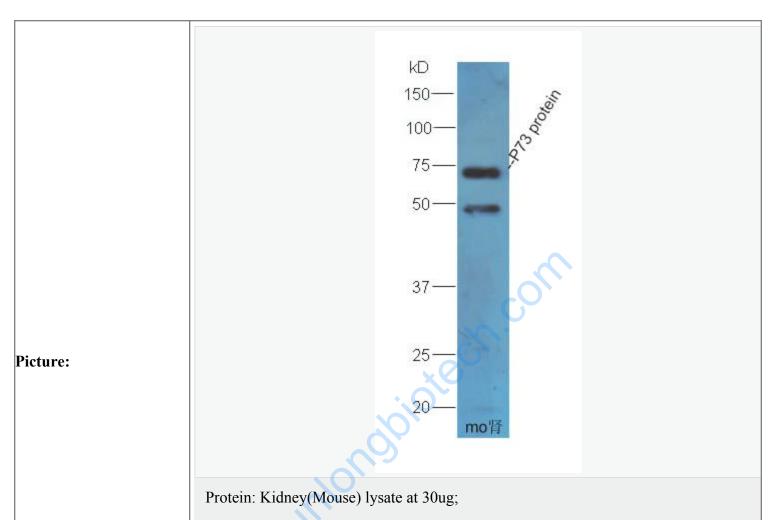
Unigene: 706990Human

Unigene: 78015Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

P73是p53基因家族的第一个成员p53基因是一个经典的抑癌基因,与p53在结构和功能方面具有很高的相似性。

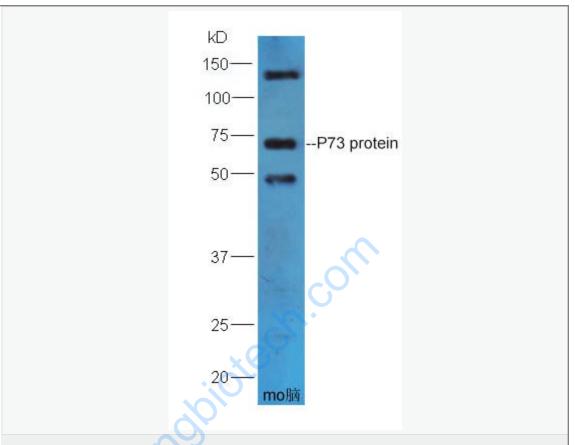


Primary: Anti-P73 protein (SL1346R) at 1:300 dilution;

Secondary: HRP conjugated Goat-Anti-Rabbit IgG(SL1346R) at 1: 5000 dilution;

Predicted band size: 70 kD

Observed band size :70 kD



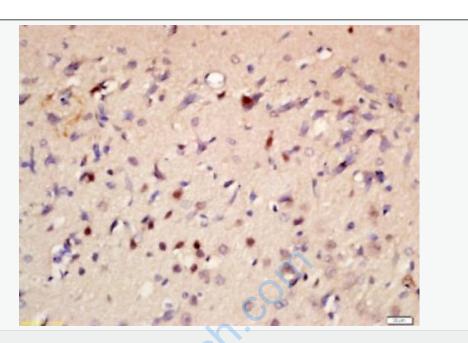
Sample: Brain(Mouse) lysates;

Primary: Anti-P73 protein (SL1346R) at 1:300 dilution;

Secondary: HRP conjugated Goat-Anti-Rabbit IgG(SL1346R) at 1: 5000 dilution;

Predicted band size: 70 kD

Observed band size: 70 kD



Tissue/cell: rat brain 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°C for 20 min;

Incubation: Anti-P73 protein Polyclonal Antibody, Unconjugated(SL1346R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining