

Rabbit Anti-p73 alpha antibody

SL6147R

p73 alpha	
p53相关蛋白P73α抗体	
P73 alpha protein; In response to double-strand DNA breaks, promotes p53/TP53 phosphorylation on 'Ser-46' and subsequent apoptosis; Tumor protein p73; p53-like	
transcription factor; p53-related protein; TP73; P73; P73_HUMAN.	
Rabbit	
Polyclonal	
Human, Mouse, Rat, Dog, Cow, Sheep,	
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.	
70kDa	
The nucleuscytoplasmic	
Lyophilized or Liquid	
1mg/ml	
KLH conjugated synthetic peptide derived from mouse p73 alpha:301-350/636	
IgG	
affinity purified by Protein A	
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.	
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.
<u>PubMed</u>	
This gene encodes a member of the p53 family of transcription factors involved in	
cellular responses to stress and development. It maps to a region on chromosome 1p36 that is frequently deleted in neuroblastoma and other tumors, and thought to contain multiple tumor suppressor genes. The demonstration that this gene is monoallelically	
	expressed (likely from the maternal allele), supports the notion that it is a candidate

gene for neuroblastoma. Many transcript variants resulting from alternative splicing and/or use of alternate promoters have been found for this gene, but the biological validity and the full-length nature of some variants have not been determined. [provided by RefSeq, Feb 2011].

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: 7161 Human

Entrez Gene: 22062 Mouse

Entrez Gene: 362675 Rat

Omim: 601990 Human

SwissProt: O15350 Human

SwissProt: Q9JJP2 Mouse

Unigene: 697294 Human

Unigene: 706990 Human

<u>Unigene: 78015</u> Mouse

Important Note:

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