

Rabbit Anti-TP53 Polyclonal Antibody

CPB-1905RH Rabbit(TP53)

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Rabbit Anti-TP53 Polyclonal Antibody
Antigen Description	p53 is a transcription factor that regulates the cell cycle and hence functions as a tumor suppressor. p53 has been described as "the guardian of the genome", referring to its role in conserving stability by preventing genome mutation. p53 has many anti-cancer mechanisms: activating DNA repair proteins when DNA has sustained damage, holding the cell cycle at the G1/S regulation point on DNA damage recognition, initiating apoptosis if the DNA damage proves to be irreparable. Human p53 is 393 amino acids long and has three domains: 1) N-terminal transcription-activation domain (TAD), which activates transcription factors. 2) central DNA-binding core domain (DBD) 3) C-terminal homo-oligomerisation domain (OD); tetramerization greatly increases the activity of p53 in vivo. Mutations that deactivate p53 in cancer usually occur in the DBD and most of these mutations destroy the ability of the protein to bind to its target DNA sequences
specificity	Human
Target	TP53
Immunogen	Synthetic peptide
Host	Rabbit
Isotype	IgG
Species	Human
conjugation	N/A
Applications	WB

PACKAGING

Storage	Store for 1 year at -20°C from date of shipment
----------------	---

ANTIGEN GENE INFORMATION

Gene Name	TP53 tumor protein p53 [Homo sapiens]
Official Symbol	TP53
Synonyms	TP53; tumor protein p53; cellular tumor antigen p53; LFS1; Li Fraumeni syndrome; p53; antigen NY-CO-13; mutant p53 protein; phosphoprotein p53; p53 tumor suppressor; truncated p53 protein; tumor suppressor TP53; transformation-related protein 53; P53; TRP53; FLJ92943;
GeneID	7157
mRNA Refseq	NM_000546
Protein Refseq	NP_000537
MIM	191170
UniProt ID	P04637
Chromosome Location	17p13.1

Pathway

Activation of BH3-only proteins, organism-specific biosystem; Activation of NOXA and translocation to mitochondria, organism-specific biosystem; Activation of PUMA and translocation to mitochondria, organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), conserved biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; Apoptosis, organism-specific biosystem;

Function

ATP binding; DNA binding; DNA strand annealing activity; MDM2 binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved in positive regulation of transcription; RNA polymerase II transcription factor binding; chaperone binding; chromatin binding; copper ion binding; damaged DNA binding; enzyme binding; histone acetyltransferase binding; histone deacetylase regulator activity; identical protein binding; metal ion binding; p53 binding; protease binding; protein N-terminus binding; protein binding; protein heterodimerization activity; protein kinase binding; protein phosphatase 2A binding; sequence-specific DNA binding transcription factor activity; transcription factor binding; transcription regulatory region DNA binding; ubiquitin protein ligase binding; zinc ion binding;