

Product datasheet for **TA302001**

p53 (TP53) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:1000, IF: 1:10~50, IHC: 1:10~50
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This p53 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 33-62 amino acids from human p53.
Formulation:	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Concentration:	lot specific
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	43653 Da
Gene Name:	tumor protein p53
Database Link:	NP_000537 Entrez Gene 7157 Human P04637



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Background:

Tumor protein p53, a nuclear protein, plays an essential role in the regulation of cell cycle, specifically in the transition from G0 to G1. It is found in very low levels in normal cells, however, in a variety of transformed cell lines, it is expressed in high amounts, and believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing DNA-binding, oligomerization and transcription activation domains. It is postulated to bind as a tetramer to a p53-binding site and activate expression of downstream genes that inhibit growth and/or invasion, and thus function as a tumor suppressor. Mutants of p53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and hence cause the loss of tumor suppressor activity. Alterations of the TP53 gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome.

Synonyms:

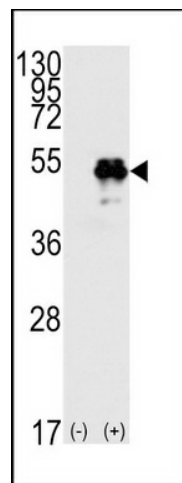
BCC7; LFS1; P53; TRP53

Protein Families:

Druggable Genome, Stem cell - Pluripotency, Transcription Factors

Protein Pathways:

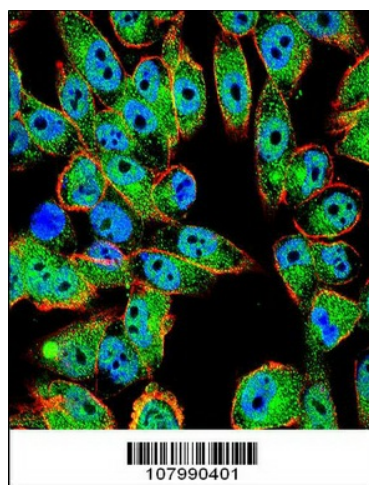
Amyotrophic lateral sclerosis (ALS), Apoptosis, Basal cell carcinoma, Bladder cancer, Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, Glioma, Huntington's disease, MAPK signaling pathway, Melanoma, Neurotrophin signaling pathway, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer, Prostate cancer, Small cell lung cancer, Thyroid cancer, Wnt signaling pathway

Product images:

Western blot analysis of TP53 (arrow) using rabbit polyclonal p53 Antibody (T55) (Cat.#TA302001). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the TP53 gene (Lane 2) (Origene Technologies).



p53 Antibody (T55) (Cat. #TA302001) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of p53 Antibody (T55) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of p53 Antibody (T55) (Cat#TA302001) with A2058 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).