

## **Product datasheet for TA329140**

## p53 (TP53) Rabbit Polyclonal Antibody

## **Product data:**

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: WB, IHC, ChIP

Reactivity: Human
Host: Rabbit
Isotype: IgG

Clonality: Polyclonal

**Immunogen:** The immunogen for anti-TP53 antibody: synthetic peptide directed towards the N terminal of

human TP53. Synthetic peptide located within the following region: EEPQSDPSVEPPLSQETFSDLWKLLPENNVLSPLPSQAMDDLMLSPDDIE

Formulation: Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2%

sucrose.

Note that this product is shipped as lyophilized powder to China customers.

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 44 kDa

**Gene Name:** tumor protein p53

Database Link: NP 000537

Entrez Gene 7157 Human

P04637



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Background:

TP53 acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved in cell cycle regulation as a trans-activator that acts to negatively regulate cell division by controlling a set of genes required for this process. This gene encodes tumor protein p53, which responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low level in normal cells and at a high level in a variety of transformed cell lines, where it's believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing transcription activation, DNA-binding, and oligomerization domains. It is postulated to bind to a p53binding 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 this gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome. Multiple p53 variants due to alternative promoters and multiple alternative splicing have been found. These variants encode distinct isoforms, which can regulate p53 transcriptional activity.

Synonyms: BCC7; LFS1; P53; TRP53

Note: Immunogen sequence homology: Pig: 100%; Human: 100%; Sheep: 100%; Bovine: 100%;

Rabbit: 100%; Rat: 90%; Horse: 90%; Guinea pig: 90%; Dog: 80%

**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

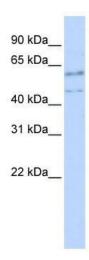
Protein Pathways: Amyotrophic lateral sclerosis (ALS), Apoptosis, Basal cell carcinoma, Bladder cancer, Cell cycle,

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,

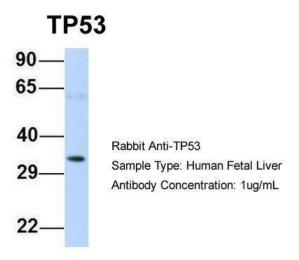
Small cell lung cancer, Thyroid cancer, Wnt signaling pathway



## **Product images:**

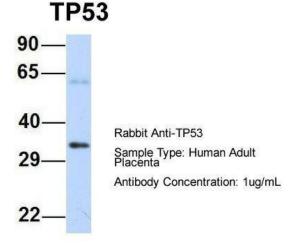


WB Suggested Anti-TP53 Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1:1562500; Positive Control: 293T cell lysate.TP53 is strongly supported by BioGPS gene expression data to be expressed in HEK293T

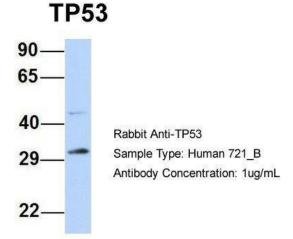


Host: Rabbit; Target Name: TP53; Sample Tissue: Human Fetal Liver; Antibody Dilution: 1.0ug/ml

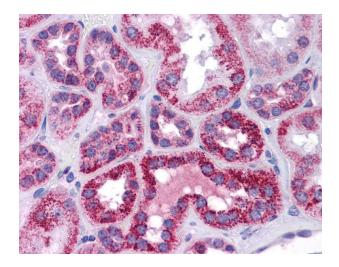




Host: Rabbit; Target Name: TP53; Sample Tissue: Human Adult Placenta; Antibody Dilution: 1.0ug/ml

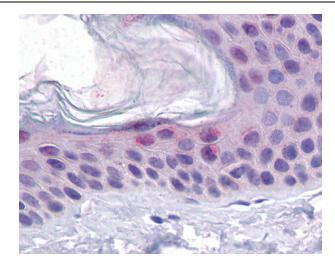


Host: Rabbit; Target Name: TP53; Sample Tissue: Human 721\_B; Antibody Dilution: 1.0ug/ml; TP53 is strongly supported by BioGPS gene expression data to be expressed in Human 721\_B cells



Immunohistochemistry with U20S/ PLKO cells tissue





Immunohistochemistry with U20S/ PLKO cells tissue

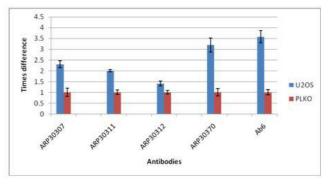


Figure 1. Binding of p53-specific antibodies to the p21 promoter.

Application: Chlp Assay Application data in forum Submitted by: Nick Barlev Department of Biochemistry University of Leicester Sample Type : U20S/ PLKO cells