

## Product datasheet for CF503034

## OriGene Technologies, Inc.

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# p53 (TP53) Mouse Monoclonal Antibody [Clone ID: OTI2H6]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI2H6

**Applications:** IF, IHC, WB

**Recommended Dilution:** WB 1:500~2000, IHC 1:150, IF 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human TP53(NP\_000537) produced in HEK293T

cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

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

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

Predicted Protein Size: 43.5 kDa

**Gene Name:** tumor protein p53

Database Link: NP 000537

Entrez Gene 7157 Human

P04637





Background:

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 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 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. [provided by RefSeq]

Synonyms: BCC7; LFS1; P53; TRP53

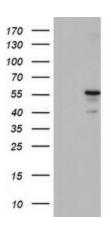
**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**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,

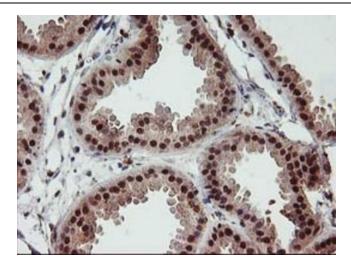
Small cell lung cancer, Thyroid cancer, Wnt signaling pathway

# **Product images:**

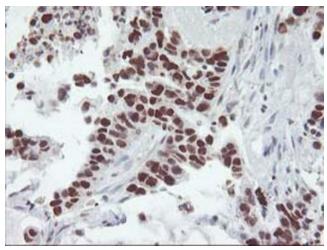


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY TP53 ([RC200003], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TP53. Positive lysates [LY400186] (100ug) and [LC400186] (20ug) can be purchased separately from OriGene.

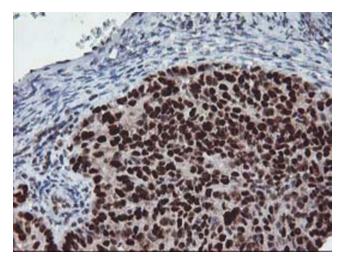




Immunohistochemical staining of paraffinembedded Human breast tissue within the normal limits using anti-TP53 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503034])

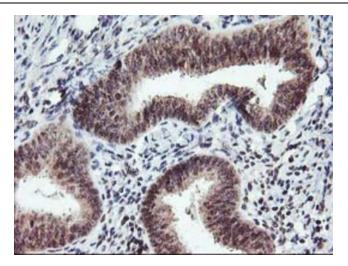


Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-TP53 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503034])

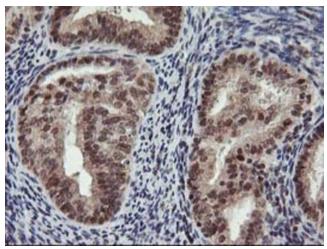


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-TP53 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503034])

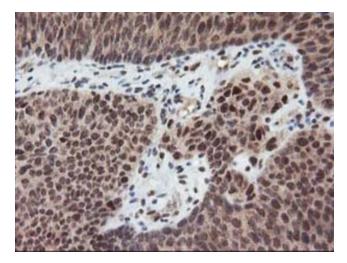




Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-TP53 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503034])

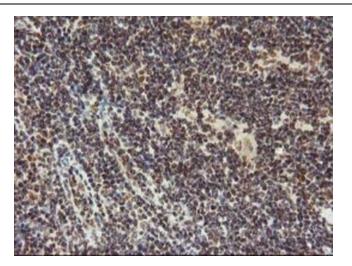


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-TP53 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503034])

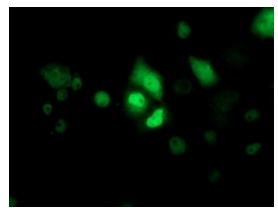


Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-TP53 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503034])





Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-TP53 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503034])



Anti-TP53 mouse monoclonal antibody ([TA503034]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY TP53 ([RC200003]).