

## Datasheet

### TP53 (Human) Recombinant Protein (P02)

**Catalog Number:** H00007157-P02

**Regulation Status:** For research use only (RUO)

**Product Description:** Human TP53 full-length ORF (AAH03596, 1 a.a. - 393 a.a.) recombinant protein with GST-tag at N-terminal.

**Sequence:**

MEE PQSDPSVEPPLSQETFS DLWKLLPEN NVLSPLPS  
QAMDDLMLSPDDIEQWFTEDPGPDEAPRMPEAAPRV  
APAPAAPTPAAPAPSWPLSSSVPSQKTYQGSYGFR  
LGFLHSGTAKSVTCTYSPALNKMFCQLAKTCPVQLWV  
DSTPPPGTRVRAMAIYKQSQHMTEVVRRCPPHHERCS  
DSDGLAPPQHLIRVEGNLRVEYLDDRNTFRHSVVVPY  
EPPEVGSDCTTIHYNMCMSSCMGGMNRRPILITITLE  
DSSGNLLGRNSFEVRVCACAGRDRRTEENLRKKGE  
PHHELPPGSTKRALPNNTSSSPQPKKKPLDGEYFTLQI  
RGRERFEMFRELNEALELKDAQAGKEPGGSAHSSH  
LKSKKGQSTSRHKKLMFKTEGPDSD

**Host:** Wheat Germ (in vitro)

**Theoretical MW (kDa):** 68.97

**Applications:** AP, Array, ELISA, WB-Re  
(See our web site product page for detailed applications information)

**Protocols:** See our web site at  
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Preparation Method:** [in vitro wheat germ expression system](#)

**Purification:** Glutathione Sepharose 4 Fast Flow

**Storage Buffer:** 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

**Storage Instruction:** Store at -80°C. Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 7157

**Gene Symbol:** TP53

**Gene Alias:** FLJ92943, LFS1, TRP53, p53

**Gene Summary:** 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]

**References:**

1. A multiparametric serum marker panel as a complementary test to mammography for the diagnosis of node negative early-stage breast cancer and DCIS in young women. Lacombe J, Mange A, Bougnoux AC, Prassas I, Solassol J Cancer Epidemiol Biomarkers Prev. 2014 Jun 23. pii: cebp.0267.2014.
2. Global tumor protein p53/p63 interactome: making a case for cisplatin chemoresistance. Huang Y, Jeong JS, Okamura J, Sook-Kim M, Zhu H, Guerrero-Preston R, Ratovitski EA Cell Cycle. 2012 Jun 15;11(12):2367-79. doi: 10.4161/cc.20863. Epub 2012 Jun 15.