# Enzymax, LLC

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# **Product Information**

Product Name: p53, humanCatalog #:40Size:5 μgPrice:\$250

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Product: Human p53

### **Product Description:**

The molecular mass of p53 protein is predicted to be 44 kDa according to its protein sequence. However, the protein migrates as a 53 kDa protein on SDS-PAGE, hence its name p53. p53 (also known as TP53) is an important tumor suppressor and is mutated in about 50% of all human tumors. It acts as a transcription factor that regulates the cell cycle. p53 functions as an important cell cycle checkpoint protein and promotes Additionally, this protein also apoptosis. activates DNA repair. Thus, p53 plays a critical role in DNA damage signaling that promotes genomic stability of the cell. This protein is probably the most extensively studied protein. Many different activities of this protein have been reported in the literature. p53 is regulated at multiple levels. One important regulation is through its binding to MDM2 protein, which suppresses p53 function by promoting its degradation via ubiquitination.

Recombinant p53 protein was purified from *E. coli*, hence, lacking any modifications such as phosphorylation or ubiquitination. Purified p53 is unstable, readily undergoing degradations.

**Source:** Recombinant full length human p53 expressed in *E.coli*.

## Molecular Weight: 44 kDa

### **Presentation:**

Purified human p53 protein in 50 mM Tris-HCl, (pH7.8), 150 mM NaCl, and 10% glycerol.

### Storage:

Stable for 2 years at -70°C from date of shipment. Aliquot to avoid repeated freezing and thawing.

### **SDS-PAGE** analysis:



**Purified human p53.** The protein (100 ng) was analyzed by electrophoresis on a 15% SDS-polyacrylamide gel and visualized by staining with Coomassie blue. Lane 1 indicates p53 whose identity was confirmed by Western blot analysis. Protein size markers are indicated on the left.