

Recombinant p53 (TP53) protein

Catalog No: 81091, 81791

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Concentration: 0.3 µg/µl

Source: Human

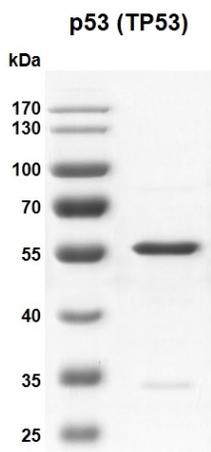
Buffer Contents: Recombinant p53 (TP53) protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

Background: p53 (TP53) (Tumor Protein P53), also known as Phosphoprotein P53, Transformation-Related Protein 53 or Antigen NY-CO-13, is a tumor suppressor protein containing transcriptional activation, DNA binding, and oligomerization domains. It involves 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. p53 induces the transcription of long intergenic non-coding RNA p21 (lincRNA-p21) and lincRNA-Mkl1, thus participating in TP53-dependent transcriptional repression leading to apoptosis and seem to have to effect on cell-cycle regulation. It is required for apoptosis induction, which seems to be mediated either by stimulation of BAX and FAS antigen expression, or by repression of Bcl-2 expression. In cooperation with mitochondrial PPIF, p53 also is involved in activating oxidative stress-induced necrosis, which is largely independent of transcription.

Protein Details: Recombinant p53 (TP53) protein was expressed in a baculovirus expression system as the full length protein (accession number NP_000537.3) with an N-terminal FLAG tag. The molecular weight of the protein is 44.9 kDa.

Application Notes: Recombinant p53 (TP53) protein is suitable for use in the study of protein-protein interaction, *in vitro* transcription assay, binding assay.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

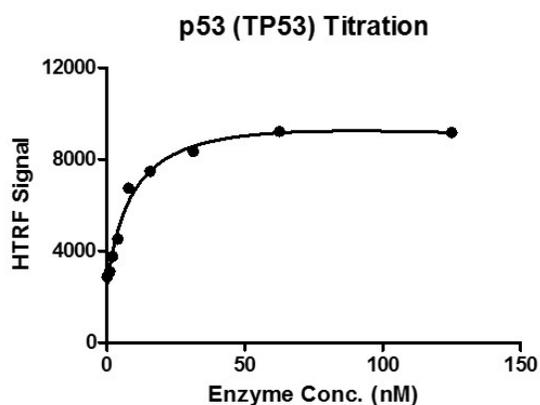


Recombinant p53 (TP53) protein gel

10% SDS-PAGE Coomassie staining

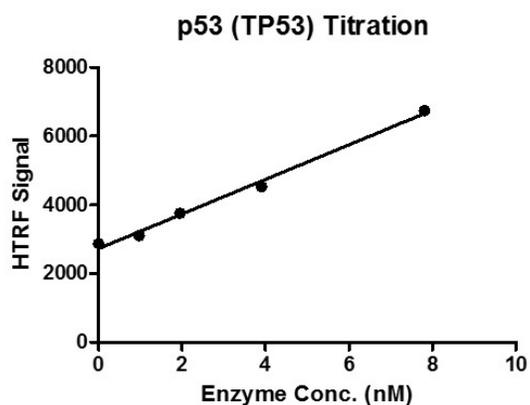
MW: 44.9 kDa

Purity: $\geq 95\%$



HTRF assay for p53 (TP53) activity

1 μ M oligo ds DNA (sequence: 5'-CCGGACATGCCCGGGCATGT-3') was incubated with p53 (TP53) for 1 hour, then 10 μ l FLAG antibody and SA-XL665 mixture (each 1:100 dilution in binding buffer) was added to each reaction system and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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