



# Recombinant Rat Cellular tumor antigen p53 (Tp53)

<b>Product Code</b>	CSB-YP024077RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P10361
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MEDSQSDMSI ELPLSQETFS CLWKLLPPDD ILPTTATGSP NSMEDLFLPQ DVAELLEGPE EALQVSAPAA QEPGTEAPAP VAPASATPWP LSSSVPSQKT YQGNYGFFHLG FLQSGTAKSV MCTYSISLNK LFCQLAKTCP VQLWVTSTPP PGTRVRAMAI YKKSQHMTEV VRRCPHHERC SDGDGLAPPQ HLRIVEGNPY AEYLDDRQTF RHSVVVPYEP PEVGSDYTTI HYKYMENSSC MGGMNRRLPIL TIITLEDSSG NLLGRDSFEV RVCACPGRDR RTEEENFRKK EEHCPELPPG SAKRALPTST SSSPQQKKKP LDGEYFTLKI RGRERFEMFR ELNEALELKD ARAAEESGDS RAHSSYPKTK KGQSTSRHKK PMIKKVGPDSD
<b>Source</b>	Yeast
<b>Target Names</b>	Tp53
<b>Protein Names</b>	Recommended name: Cellular tumor antigen p53 Alternative name(s): Tumor suppressor p53
<b>Expression Region</b>	1-391
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	full length protein
<b>Target Details</b>	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 is 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.

---

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

---

**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.