

p53-S315 Non-phospho Control Peptide
Synthetic Peptide
Catalog # SP2051c**Specification**

p53-S315 Non-phospho Control Peptide - Product Information

Primary Accession	P61260
Other Accession	P56423 , P04637 , P56424 , P13481
Sequence	LPNNTSSSPQPKKKPC

p53-S315 Non-phospho Control Peptide - Additional Information**Other Names**

Cellular tumor antigen p53, Tumor suppressor p53, TP53, P53

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

p53-S315 Non-phospho Control Peptide - Protein Information

Name TP53

Synonyms P53

Function

Acts as a tumor suppressor in many tumor types; induces growth arrest or apoptosis depending on the physiological circumstances and cell type. Involved 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. One of the activated genes is an inhibitor of cyclin-dependent kinases. Apoptosis induction 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 is involved in activating oxidative stress-induced necrosis; the function is largely independent of transcription. Prevents CDK7 kinase activity when associated to CAK complex in response to DNA damage, thus stopping cell cycle progression. Induces the transcription of long intergenic non-coding RNA p21 (lincRNA-p21) and lincRNA-Mkl1. LincRNA- p21 participates in TP53-dependent transcriptional repression leading to apoptosis and seems to have an effect on cell-cycle regulation. Regulates the circadian clock by repressing CLOCK-BMAL1-mediated transcriptional activation of PER2.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P04637}. Nucleus {ECO:0000250|UniProtKB:P04637}. Nucleus, PML body {ECO:0000250|UniProtKB:P04637}. Endoplasmic reticulum

{ECO:0000250|UniProtKB:P04637}. Mitochondrion matrix {ECO:0000250|UniProtKB:P04637}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:P04637} Note=Interaction with BANP promotes nuclear localization. Recruited into PML bodies together with CHEK2. Translocates to mitochondria upon oxidative stress. Translocates to mitochondria in response to mitomycin C treatment (By similarity). Competitive inhibition of TP53 interaction with HSPA9/MOT-2 by UBXN2A results in increased protein abundance and subsequent translocation of TP53 to the nucleus (By similarity) {ECO:0000250|UniProtKB:P04637}

p53-S315 Non-phospho Control Peptide - Images