

53BP1 rabbit pAb

Cat No.: ES7438

For research use only

Overview

Product Name 53BP1 rabbit pAb

Host species Rabbit

Applications WB;IHC;IF;ELISA Species Cross-Reactivity Human;Rat;Mouse;

Recommended dilutions Western Blot: 1/500 - 1/2000.

Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. The antiserum was produced against synthesized

Immunogen The antiserum was produced against synthesized

peptide derived from human TP53BP1. AA

range:1744-1793

Specificity 53BP1 Polyclonal Antibody detects endogenous

levels of 53BP1 protein.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and

0.02% sodium azide.

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Tumor suppressor p53-binding protein 1

Gene Name TP53BP1

Cellular localization Nucleus . Chromosome . Chromosome, centromere,

kinetochore. Localizes to the nucleus in absence of DNA damage (PubMed:28241136). Following DNA damage, recruited to sites of DNA damage, such as double stand breaks (DSBs): recognizes and binds

histone H2A

Purification The antibody was affinity-purified from rabbit

antiserum by affinity-chromatography using

epitope-specific immunogen.

Clonality Polyclonal Concentration 1 mg/ml

Observed band

Human Gene ID 7158 Human Swiss-Prot Number Q12888

Alternative Names TP53BP1; Tumor suppressor p53-binding protein 1;



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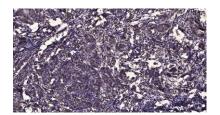


Background

53BP1; p53-binding protein 1; p53BP1 function: May have a role in checkpoint signaling during mitosis (By similarity). Enhances TP53-mediated transcriptional activation. Plays a role in the response to DNA damage., PTM: Asymmetrically dimethylated on Arg residues by PRMT1. Methylation is required for DNA binding., PTM: Phosphorylated at basal level in the absence of DNA damage. Hyper-phosphorylated in an ATM-dependent manner in response to DNA damage induced by ionizing radiation. Hyper-phosphorylated in an ATR-dependent manner in response to DNA damage induced by UV irradiation., similarity: Contains 2 BRCT domains., subcellular location: Associated with kinetochores. Both nuclear and cytoplasmic in some cells. Recruited to sites of DNA damage, such as double stand breaks. Methylation of histone H4 at 'Lys-20' is required for efficient localization to double strand breaks., subunit: Interacts with IFI202A (By similarity). Binds to the central domain of TP53/p53. May form homo-oligomers. Interacts with DCLRE1C. Interacts with histone H2AFX and this requires phosphorylation of H2AFX on 'Ser-139'. Interacts with histone H4 that has been dimethylated at 'Lys-20'. Has low affinity for histone H4 containing monomethylated 'Lys-20'. Does not bind histone H4 containing unmethylated or trimethylated 'Lys-20'. Has low affinity for histone H3 that has been dimethylated on 'Lys-79'. Has very low affinity for histone H3 that has been monomethylated on 'Lys-79' (in vitro). Does not bind unmethylated histone H3.,







Immunohistochemical analysis of paraffin-embedded human Breast cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).



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