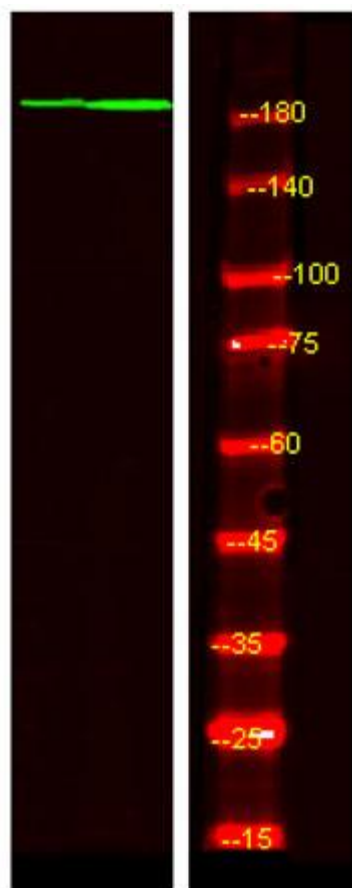


Product name:	Phospho-53BP1 (Ser1778) Rabbit Polyclonal Antibody
Cat number:	ABP11227
Conjugate:	Unconjugated
Size:	100 ug
Clone:	POLY
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized phosho peptide around human 53BP1 (Ser1778)
Reactivity:	Human, Rat, Mouse
Applications:	Western Blot: 1:1000-2000
Molecular Weight:	213kD
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage:	Store at -20°C. Avoid repeated freeze-thaw cycles.
Background:	p53-binding protein 1 (53BP1) was originally identified as a p53 binding partner that could enhance the transcriptional activity of p53. 53BP1 consists of two BRCA1 carboxy terminal (BRCT) domains that allow for binding to p53 and a separate domain responsible for binding to phosphorylated histone H2A.X. 53BP1 rapidly translocates to nuclear foci following treatment of cells with ionizing radiation (IR) or radiomimetic agents that cause DNA double strand breaks (DSBs). Because of this localization to DSBs and homology to the yeast protein Rad9, a role for 53BP1 in DSB repair has been proposed. Recruitment of 53BP1 to sites of DNA damage has been demonstrated to be independent of ATM, NBS1, and DNA-PK and retention of 53BP1 at DNA breaks requires phosphorylated H2A.X. In cells lacking 53BP1, phosphorylation of ATM substrates is reduced, suggesting that 53BP1 is upstream of ATM. In response to IR, phosphorylation of 53BP1 at serines 6, 25, 29, and 784 by ATM has been demonstrated, but phosphorylation at these sites is not required for localization of 53BP1 to sites of DSBs. Phosphorylation of 53BP1 at Ser1618 has been reported to be enriched in human cells arrested in mitosis.



Western Blot analysis of HeLa treated or untreated by LPS lysis, using primary antibody at 1:1000 dilution. Secondary antibody was diluted at 1:10000.