## Phospho-53BP1 (Ser25/29) Ab

Cat.#: DF2977 Concn.: 1mg/ml Mol.Wt.: 220KD Size: 100ul,200ul Source: Rabbit Clonality: Polyclonal

Application: WB 1:1000-3000, IF/ICC 1:100-1:500

Reactivity: Rat, Human, Mouse, Monkey

Purification: The Ab is from purified rabbit serum by affinity purification

via sequential chromatography on phospho- and non-

phospho-peptide affinity columns.

Specificity: Phospho-53BP1 (Ser25/29) Ab detects endogenous levels of

53BP1 only when phosphorylated at Ser25/29

Immunogen: A synthesized peptide derived from human Phospho-53BP1

(Ser25/29)

Uniprot: Q12888

Subcellular Location: Nucleus, Chromosome > centromere > kinetochore.

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.

Similarity: The Tudor-like region mediates binding to histone H4

dimethylated at 'Lys-20' (H4K20me2) (PubMed:17190600). Interaction with NUDT16L1/TIRR masks the Tudor-like domain and prevents recruitment to chromatin

(PubMed:28241136).The UDR (ubiquitin-dependent recruitment) motif specifically recognizes and binds histone

H2A monoubiquitinated at 'Lys-15' (H2AK15ub)

(PubMed:23760478, PubMed:24703952). Phosphorylation of

the UDR blocks interaction with H2AK15ub

(PubMed:24703952).

Storage Condition and

Buffer:

Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20

°C.Stable for 12 months from date of receipt



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Western blot analysis Phospho-53BP1 (Ser25/29) using 293 whole cell lysates



DF2977 staining COS7 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at  $4^{\circ}$ C with gentle shaking, overnight.

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