

p-53BP1 (265.Ser 25): sc-135749

BACKGROUND

53BP1, also known as TP53BP1 (tumor protein p53 binding protein 1) or p202, is a 1,972 amino acid protein that is associated with kinetochores and contains 2 BRCT domains. Existing as multiple alternatively spliced isoforms, 53BP1 interacts with p53 and is thought to play a role in checkpoint signaling during mitosis, possibly enhancing p53-mediated transcriptional activation and influencing the cellular response to DNA damage. 53BP1 is subject to post-translational phosphorylation on specific amino acid residues, including Ser 1778, Ser 25 and Ser 29. The gene encoding 53BP1 maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TP53BP1 (human) mapping to 15q15.3; Trp53bp1 (mouse) mapping to 2 E5.

SOURCE

p-53BP1 (265.Ser 25) is a mouse monoclonal antibody raised against a short amino acid sequence containing Ser 25 phosphorylated 53BP1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

p-53BP1 (265.Ser 25) is recommended for detection of Ser 25 phosphorylated 53BP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for 53BP1 siRNA (h): sc-37455, 53BP1 siRNA (m): sc-37456, 53BP1 shRNA Plasmid (h): sc-37455-SH, 53BP1 shRNA Plasmid (m): sc-37456-SH, 53BP1 shRNA (h) Lentiviral Particles: sc-37455-V and 53BP1 shRNA (m) Lentiviral Particles: sc-37456-V.

Molecular Weight (predicted) of p-53BP1: 214 kDa.

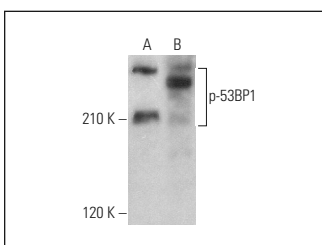
Molecular Weight (observed) of p-53BP1: 245-460 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185 or human brain tissue extract.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Lambda Phosphatase: sc-200312A and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



p-53BP1 (265.Ser 25): sc-135749. Western blot analysis of 53BP1 phosphorylation in Neuro-2A whole cell lysate (A) and human brain tissue extract (B).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures. Not for resale.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.