

ASPP1 (54.2): sc-53860

BACKGROUND

ASPP proteins interact with p53 and are responsible for enhancing p53-induced apoptosis but not cell cycle arrest. Inhibition of endogenous ASPP1 (PPP1R13B) function inhibits the apoptotic function of endogenous p53 in response to apoptotic stimuli. ASPP1 amplifies DNA binding and transactivation function of p53 on the promoters of proapoptotic genes *in vivo*. Expression of ASPP1 is often downregulated in human breast carcinomas expressing wildtype p53, but not in those expressing mutant p53. This research indicates that ASPP1 regulates the tumor suppression function of p53 *in vivo*. ASPP1 is predominantly a cytoplasmic protein, although some fraction of the polypeptide is nuclear. Defects in PPP1R13B, the gene which encodes ASPP1, may be a cause of breast cancers. The deduced ASPP1 protein contains 1,090 amino acid residues.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PPP1R13B (human) mapping to 14q32.33; Ppp1r13b (mouse) mapping to 12 F1.

SOURCE

ASPP1 (54.2) is a mouse monoclonal antibody raised against recombinant ASPP1 corresponding to the N-terminal region of human 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

ASPP1 (54.2) is recommended for detection of ASPP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for ASPP1 siRNA (h): sc-60214, ASPP1 siRNA (m): sc-60215, ASPP1 shRNA Plasmid (h): sc-60214-SH, ASPP1 shRNA Plasmid (m): sc-60215-SH, ASPP1 shRNA (h) Lentiviral Particles: sc-60214-V and ASPP1 shRNA (m) Lentiviral Particles: sc-60215-V.

Molecular Weight of ASPP1: 119 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

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 A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

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.

PROTOCOLS

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