

INCA1 (W-17): sc-243077

BACKGROUND

INCA1 (inhibitor of CDK, cyclin A1 interacting protein 1), also known as HSD45, is a 236 amino acid nuclear protein that is highly expressed in testis and found at lower levels in ovary. Belonging to the INCA family, INCA1 interacts with cyclin A1, and along with other interacting, partners acts as substrate for the cyclin A1-CDK2 kinase complex. INCA1 exists as 2 alternatively spliced isoforms and is encoded by a gene located on human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: INCA1 (human) mapping to 17p13.2.

SOURCE

INCA1 (W-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of INCA1 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243077 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

INCA1 (W-17) is recommended for detection of INCA1 of 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for INCA1 siRNA (h): sc-93629, INCA1 shRNA Plasmid (h): sc-93629-SH and INCA1 shRNA (h) Lentiviral Particles: sc-93629-V.

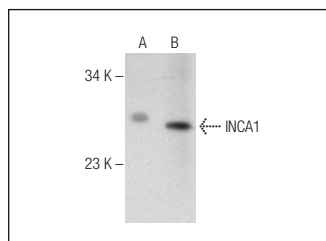
Molecular Weight of INCA1 isoforms 1/2: 27/25 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or human testis tissue extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), 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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



INCA1 (W-17): sc-243077. Western blot analysis of INCA1 expression in HeLa nuclear extract (A) and human testis tissue extract (B).

RESEARCH USE

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