CIP2A (4A9-1A2): sc-80660

BACKGROUND
Cancerous inhibitor of protein phosphatase 2A (CIP2A), also designated β90 autoantigen or KIAA1524, is a single-pass membrane protein that exhibits oncogenic activity. CIP2A is known to inhibit PP2A (protein phosphatase 2A) dephosphorylation of c-Myc, thereby stabilizing c-Myc (an oncogenic transcription factor) and promoting tumor formation and malignant cell growth. PP2A is a trimeric protein complex consisting of three subunits: a scaffold subunit, a catalytic subunit and a regulatory subunit. CIP2A specifically interacts with the catalytic subunit of PP2A to inhibit its activity. Inhibition of PP2A activity is a crucial step allowing for the progression of human cell transformation. Further supporting its role as an oncoprotein, CIP2A is known to be overexpressed in colon, gastric and head and neck squamous cell carcinomas.

CHROMOSOMAL LOCATION
Genetic locus: KIAA1524 (human) mapping to 3q13.13; C330027C09Rik (mouse) mapping to 16 B5.

SOURCE
CIP2A (4A9-1A2) is a mouse monoclonal antibody raised against C-terminal CIP2A 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. CIP2A (4A9-1A2) is available conjugated to agarose (sc-80660 AC), 500 µg/0.25 ml agarose in 1 ml, for WB, IP; and ELISA; to either phycocerythrin (sc-80660 PE), fluorescein (sc-80660 FITC), Alexa Fluor® 488 (sc-80660 AF488), Alexa Fluor® 546 (sc-80660 AF546), Alexa Fluor® 594 (sc-80660 AF594) or Alexa Fluor® 647 (sc-80660 AF647), 200 µg/ml, for WB (RGB), IF, IHC(PO) and FCM; and to either Alexa Fluor® 680 (sc-80660 AF680) or Alexa Fluor® 790 (sc-80660 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IHC(PO) and FCM. Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

APPLICATIONS
CIP2A (4A9-1A2) is recommended for detection of CIP2A of human origin, C330027C09Rik of mouse origin and the corresponding rat homolog 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for CIP2A siRNA (h): sc-77964, C330027C09Rik siRNA (m): sc-141907, CIP2A shRNA Plasmid (h): sc-77964-SH, C330027C09Rik shRNA Plasmid (m): sc-141907-SH, CIP2A shRNA (h) Lentiviral Particles: sc-77964-V and C330027C09Rik shRNA (m) Lentiviral Particles: sc-141907-V.

Molecular Weight of CIP2A: 90 kDa.

Positive Controls: AN3 CA cell lysate: sc-24662, MDA-MB-231 cell lysate: sc-2232 or SW480 cell lysate: sc-2219.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminal Reagent: sc-2048.
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

SELECT PRODUCT CITATIONS

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.