

p53RFP/IBRDC2 (L-15): sc-33017

BACKGROUND

p53 is the most commonly mutated gene in human cancer identified to date. Expression of p53 leads to inhibition of cell growth by preventing progression of cells from G₁ S phase of the cell cycle. Most importantly, p53 functions to cause arrest of cells in the G₁ phase of the cell cycle following any exposure of cells to DNA-damaging agents. The MDM2 (murine double minute-2) protein was initially identified as an oncogene in a murine transfection system. MDM2 functions to bind p53 and block p53-mediated transactivation of cotransfected reporter constructs. The MDM2 gene is amplified in a high percentage of human sarcomas that retain wildtype p53 and tumor cells that overexpress MDM2 can tolerate high levels of p53 expression. Another p53 target protein is the p53-inducible RING finger protein (p53RFP), an auto-ubiquitinated protein acting as an E3 ubiquitin ligase. p53RFP, also designated IBRDC2 in mouse and rat, receives ubiquitin from specific E2 ubiquitin-conjugating enzymes and transfers it to substrates that promote their degradation by the proteasome. p53RFP may mediate re-entry into the cell cycle.

CHROMOSOMAL LOCATION

Genetic locus: RNF144B (human) mapping to 6p22.3; Rnf144b (mouse) mapping to 13 A5.

SOURCE

p53RFP/IBRDC2 (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of p53RFP of human origin.

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-33017 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p53RFP/IBRDC2 (L-15) is recommended for detection of p53RFP of human origin and IBRDC2 of mouse and rat 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).

p53RFP/IBRDC2 (L-15) is also recommended for detection of p53RFP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for p53RFP siRNA (h): sc-44824, IBRDC2 siRNA (m): sc-44825, p53RFP shRNA Plasmid (h): sc-44824-SH, IBRDC2 shRNA Plasmid (m): sc-44825-SH, p53RFP shRNA (h) Lentiviral Particles: sc-44824-V and IBRDC2 shRNA (m) Lentiviral Particles: sc-44825-V.

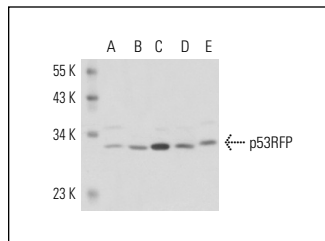
Molecular Weight of p53RFP/IBRDC2: 34 kDa.

Positive Controls: MCF7 nuclear extract: sc-2149, T-47D cell lysate: sc-2293 or IBRDC2 (m): 293T Lysate: sc-120934.

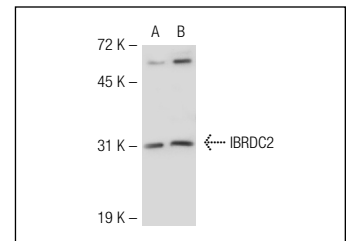
RECOMMENDED SECONDARY REAGENTS

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



p53RFP/IBRDC2 (L-15): sc-33017. Western blot analysis of p53RFP expression in HeLa (A), NIH/3T3 (B) and MCF7 (C) nuclear extracts and HeLa (D) and T-47D (E) whole cell lysates.



p53RFP/IBRDC2 (L-15): sc-33017. Western blot analysis of IBRDC2 expression in non-transfected: sc-117752 (A) and mouse IBRDC2 transfected: sc-120934 (B) 293T whole cell lysates.

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 or our catalog for detailed protocols and support products.


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Guaranteed

Try **p53RFP (U-16): sc-101247**, our highly recommended monoclonal alternative to p53RFP/IBRDC2 (L-15).