**BACKGROUND**

The p53 gene is a widely studied anti-oncogene, or tumor suppressor gene. The p53 gene product can act as a negative regulator of cell growth in response to DNA damage. Mutations and allelic loss of the p53 gene have been associated with malignant transformation in a wide variety of human tumors. p53 shares considerable sequence similarity with p73, a gene that maps to a region in chromosome 1 that is frequently deleted in neuroblastomas. However, p73 does not appear to be activated by DNA damaging agents. The p73 isoform p73α inhibits drug-induced apoptosis in small cell lung carcinoma cells, while the p73 isoform p73β promotes it. p73α also prevents Bax activation, mitochondrial dysfunction, caspase activation and is able to reduce apoptosis induced by the BH3-only protein PUMA (p53 upregulated modulator of apoptosis). There is an equilibrium between p73α and p73β, demonstrated by the fact that p73α inhibits the pro-apoptotic effect of p73β.

**CHROMOSOMAL LOCATION**

Genetic locus: TP73 (human) mapping to 1p36.32.

**SOURCE**

p73 (E-4) is a mouse monoclonal antibody raised against amino acids 1-80 mapping at the N-terminus of p73 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p73 (E-4) is available conjugated to agarose (sc-17823 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-17823 HRP), 200 µg/ml, for WB, HClIP and ELISA; to either phycocerythrin (sc-17823PE), fluorescein (sc-17823 FITC), Alexa Fluor® 488 (sc-17823 AF488), Alexa Fluor® 546 (sc-17823 AF546), Alexa Fluor® 594 (sc-17823 AF594) or Alexa Fluor® 647 (sc-17823 AF647), 200 µg/ml, for WB (RGB), IF, HClIP and FCM; and to either Alexa Fluor® 680 (sc-17823 AF680) or Alexa Fluor® 790 (sc-17823 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

p73 (E-4) is recommended for detection of all p73 isoforms of human and monkey origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:500), 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 p73 siRNA (h): sc-36167, p73 shRNA Plasmid (h): sc-36187-SH and p73 shRNA (h) Lentiviral Particles: sc-36167-V.

Molecular Weight of p73: 73 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, K-562 whole cell lysate: sc-2203 or SK-MEL-24 whole cell lysate: sc-364259.

**RESEARCH USE**

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

**STORAGE**

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

**DATA**


**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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

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