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 up-regulated modulator of apoptosis). There is an equilibrium between p73α and p73β, demonstrated by the fact that p73α inhibits the pro-apoptotic effect of p73β.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: TP73 (human) mapping to 1p36.32; Trp73 (mouse) mapping to 4 E2.

SOURCE

p73 (5B429) is a mouse monoclonal antibody raised against full length p73 of human origin.

PRODUCT

Each vial contains 100 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

p73 (5B429) is recommended for detection of p73 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).


Molecular Weight of p73: 73 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or A549 cell lysate: sc-2413.

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.

See p73 (E-4): sc-17823 for p73 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.