BACKGROUND

PEBP-4 (phosphatidylethanolamine-binding protein 4), also known as protein cousin-of-RKIP 1 (CORK1), is a 227 amino acid lysosomal protein that is a member of the RAF kinase inhibitory protein (RKIP) family. Unlike other RKIPs, PEBP-4 forms ternary complexes with Raf-1 and MEK and scaffolds this structure, thus resulting in the inhibition of the Raf-1/MEK/ERK signaling pathway. With preferential expression in muscle, PEBP-4 seems to control myocyte differentiation by modulation of MEK and ERK activity. Overexpression of PEBP-4 inhibits TNFα-induced activation of JNK and PE externalization, while reduced expression by siRNA knockdown results in an increase in TNFα-induced apoptosis. This suggests that PEBP-4 promotes cellular resistance to apoptosis and may be implicated in tumorigenesis.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: PEBP4 (human) mapping to 8p21.3.

SOURCE

PEBP-4 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PEBP-4 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-87355 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PEBP-4 (C-12) is recommended for detection of PEBP-4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 PEBP-4 siRNA (h): sc-77509, PEBP-4 shRNA Plasmid (h): sc-77509-SH and PEBP-4 shRNA (h) Lentiviral Particles: sc-77509-V.

Molecular Weight of PEBP-4: 26 kDa.

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-2233 and Western Blotting Luminol Reagent: sc-2248. 2) 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.

STORAGE

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

PROTOCOLS

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