

POPX2 (Q-25): sc-130847

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine protein phosphatases. POPX1 (also known as partner of PIX 1, PPM1E (protein phosphatase 1E) or PP2CH) and POPX2 (also known as partner of PIX 2, PPM1F, CaMKPase (CaM-kinase phosphatase) or FEM-2) belong to the PP2C family of serine/threonine phosphatases. Members of the PP2C family are negative regulators of cell stress response pathways. POPX2 is a ubiquitously expressed protein and POPX1 is predominantly expressed in brain and testis. POPX1 and POPX2 specifically interact with PIX (PAK interacting exchange factor) proteins and negatively regulate the activity of α PAK, a protein kinase that can lead to the breakdown of Actin stress fibers and other morphological changes. POPX2 can also interact with and regulate CaMKII activity. Overexpression of POPX2 can result in caspase-dependent apoptosis.

CHROMOSOMAL LOCATION

Genetic locus: PPM1F (human) mapping to 22q11.22; Ppm1f (mouse) mapping to 16 A3.

SOURCE

POPX2 (Q-25) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of POPX2 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

POPX2 (Q-25) is recommended for detection of POPX2 of mouse and 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), immunohistochemistry (including paraffin-embedded sections) (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 POPX2 siRNA (h): sc-62844, POPX2 siRNA (m): sc-62845, POPX2 shRNA Plasmid (h): sc-62844-SH, POPX2 shRNA Plasmid (m): sc-62845-SH, POPX2 shRNA (h) Lentiviral Particles: sc-62844-V and POPX2 shRNA (m) Lentiviral Particles: sc-62845-V.

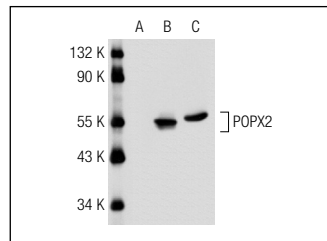
Molecular Weight of POPX2: 54 kDa.

Positive Controls: POPX2 (h2): 293T Lysate: sc-177761 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



POPX2 (Q-25): sc-130847. Western blot analysis of POPX2 expression in non-transfected 293T: sc-117752 (A), human POPX2 transfected 293T: sc-177761 (B) and Jurkat (C) whole cell lysates.

PROTOCOLS

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

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Try **POPX2 (E-2): sc-514894** or **POPX2 (G-10): sc-393806**, our highly recommended monoclonal alternatives to POPX2 (Q-25).