SANTA CRUZ BIOTECHNOLOGY, INC.

WIPI-3 (P-20): sc-83073

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. WIPI-3 (WD repeat domain phosphoinositide-interacting protein 3), also known as WD repeat-containing protein 45-like or WIPI49-like protein, is a 344 amino acid protein that is ubiquitously expressed with highest levels found in pancreas, heart and skeletal muscle. Upregulated in uterine and ovarian cancer, WIPI-3 contains two WD domains, seven WD40 domains, and is encoded by a gene that maps to human chromosome 17. Chromosome 17 comprises over 2.5% of the human genome, encodes over 1,200 genes and is associated with two key tumor suppressor genes, namely, p53 and BRCA1.

CHROMOSOMAL LOCATION

Genetic locus: WDR45L (human) mapping to 17q25.3; Wdr45l (mouse) mapping to 11 E2.

SOURCE

WIPI-3 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WIPI-3 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-83073 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

WIPI-3 (P-20) is recommended for detection of WIPI-3 of mouse, rat and human 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); non cross-reactive with other WIPI family members.

WIPI-3 (P-20) is also recommended for detection of WIPI-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for WIPI-3 siRNA (h): sc-72214, WIPI-3 siRNA (m): sc-72215, WIPI-3 shRNA Plasmid (h): sc-72214-SH, WIPI-3 shRNA Plasmid (m): sc-72215-SH, WIPI-3 shRNA (h) Lentiviral Particles: sc-72214-V and WIPI-3 shRNA (m) Lentiviral Particles: sc-72215-V.

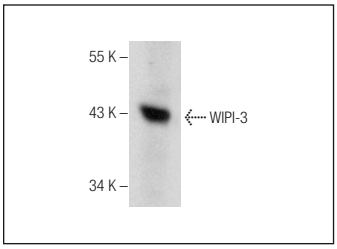
Molecular Weight of WIPI-3: 38 kDa.

Positive Controls: Mouse liver extract: sc-2256.

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



WIPI-3 (P-20): sc-83073. Western blot analysis of WIPI-3 expression in mouse liver tissue extract.

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.

MONOS Satisfaction Guaranteed

Try **WIPI-3 (B-7): sc-514194**, our highly recommended monoclonal alternative to WIPI-3 (P-20).