SANTA CRUZ BIOTECHNOLOGY, INC.

WDFY3 (N-15): sc-162395

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. WDFY3 (WD repeat and FYVE domain containing 3), also known as ALFY (autophagy-linked FYVE protein) is a 3,526 amino acid protein that localizes to the cytoplasmic side of peripheral membranes. Ubiquitously expressed, WDFY3 co-localizes with autophagic structures in starved cells and is expressed in liver, brain and kidney. WDFY3 exists as two alternatively spliced isoforms and contains one BEACH domain, one FYVE-type zinc finger, a pair of LRR (leucine-rich) repeats and five WD repeats.

REFERENCES

1. Gaullier, J.M., et al. 1998. FYVE fingers bind PtdIns(3)P. Nature 394: 432-433.
2. Gillooly, D.J., et al. 2001. Cellular functions of phosphatidylinositol 3-phosphate and FYVE domain proteins. Biochem. J. 355: 249-258.

CHROMOSOMAL LOCATION

Genetic locus: WDFY3 (human) mapping to 4q21.23; Wdfy3 (mouse) mapping to 5 E4.

SOURCE

WDFY3 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WDFY3 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-162395 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WDFY3 (N-15) is recommended for detection of WDFY3 of mouse, rat 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); non cross-reactive with WDFY1 or WDFY2.

WDFY3 (N-15) is also recommended for detection of WDFY3 in additional species, including equine, canine, bovine and avian.

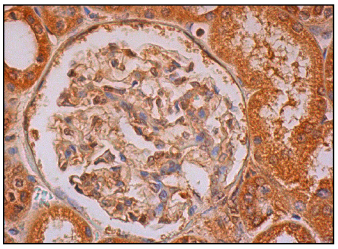
Suitable for use as control antibody for WDFY3 siRNA (h): sc-89191, WDFY3 siRNA (m): sc-155253, WDFY3 shRNA Plasmid (h): sc-89191-SH, WDFY3 shRNA Plasmid (m): sc-155253-SH, WDFY3 shRNA (h) Lentiviral Particles: sc-89191-V and WDFY3 shRNA (m) Lentiviral Particles: sc-155253-V.

Molecular Weight of WDFY3: 395 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-2333 and Western Blotting Luminol Reagent: sc-2048. 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



WDFY3 (N-15): sc-162395. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in glomeruli and cells in tubules.

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 or our catalog for detailed protocols and support products.