

# WDFY1 (I-13): sc-109152

## 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. WDFY1 (WD repeat and FYVE domain containing 1), also known as WDF1, FENS-1 or ZFYVE17, is a 410 amino acid protein that localizes to the early endosome and contains one FYVE-type zinc finger and 7 WD repeats through which it may play a role in protein trafficking and signal transduction.

## REFERENCES

1. van der Voorn, L. and Ploegh, H.L. 1992. The WD-40 repeat. *FEBS Lett.* 307: 131-134.
2. Neer, E.J., et al. 1994. The ancient regulatory-protein family of WD-repeat proteins. *Nature* 371: 297-300.
3. Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. *Trends Biochem. Sci.* 24: 181-185.
4. Nagase, T., et al. 2000. Prediction of the coding sequences of unidentified human genes. XVI. The complete sequences of 150 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 7: 65-73.
5. Ridley, S.H., et al. 2001. FENS-1 and DFPC1 are FYVE domain-containing proteins with distinct functions in the endosomal and Golgi compartments. *J. Cell Sci.* 114: 3991-4000.
6. He, J., et al. 2009. Membrane insertion of the FYVE domain is modulated by pH. *Proteins* 76: 852-860.

## CHROMOSOMAL LOCATION

Genetic locus: WDFY1 (human) mapping to 2q36.1; Wdfy1 (mouse) mapping to 1 C4.

## SOURCE

WDFY1 (I-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of WDFY1 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-109152 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

WDFY1 (I-13) is recommended for detection of WDFY1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

WDFY1 (I-13) is also recommended for detection of WDFY1 in additional species, including equine.

Suitable for use as control antibody for WDFY1 siRNA (h): sc-94708, WDFY1 siRNA (m): sc-155251, WDFY1 shRNA Plasmid (h): sc-94708-SH, WDFY1 shRNA Plasmid (m): sc-155251-SH, WDFY1 shRNA (h) Lentiviral Particles: sc-94708-V and WDFY1 shRNA (m) Lentiviral Particles: sc-155251-V.

Molecular Weight of WDFY1: 46 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.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.