

# WSB2 (P-12): sc-161262

## 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. WSB2 (WD repeat and SOCS box-containing 2), also known as CS box-containing WD protein or SBA2, is a 404 amino acid protein containing 5 WD repeats and one SOCS box domain, which may function as a bridge between certain substrate-binding domains and E3 ubiquitin protein ligases. The gene encoding WSB2 maps to human chromosome 12, which encodes over 1,100 genes, comprises approximately 4.5% of the human genome and is associated with a variety of diseases and afflictions including hypochondrogenesis, achondrogenesis, Kniest dysplasia and Noonan syndrome.

## REFERENCES

1. Garcia-Higuera, I., et al. 1998. Folding a WD repeat propeller. Role of highly conserved aspartic acid residues in the G protein  $\beta$  subunit and Sec13. *J. Biol. Chem.* 273: 9041-9049.
2. Delgado Carrasco, J., et al. 2001. Achondrogenesis type II-hypochondrogenesis: radiological features. *Case report. An. Esp. Pediatr.* 55: 553-557.
3. Kile, B.T. and Alexander, W.S. 2001. The suppressors of cytokine signalling (SOCS). *Cell. Mol. Life Sci.* 58: 1627-1635.
4. Li, D. and Roberts, R. 2001. WD-repeat proteins: structure characteristics, biological function, and their involvement in human diseases. *Cell. Mol. Life Sci.* 58: 2085-2097.
5. Kile, B.T., et al. 2002. The SOCS box: a tale of destruction and degradation. *Trends Biochem. Sci.* 27: 235-241.
6. Yokoyama, T., et al. 2003. A case of Kniest dysplasia with retinal detachment and the mutation analysis. *Am. J. Ophthalmol.* 136: 1186-1188.

## CHROMOSOMAL LOCATION

Genetic locus: WSB2 (human) mapping to 12q24.23; Wsb2 (mouse) mapping to 5 F.

## SOURCE

WSB2 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WSB2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161262 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

WSB2 (P-12) is recommended for detection of WSB2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 WSB1.

WSB2 (P-12) is also recommended for detection of WSB2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WSB2 siRNA (h): sc-95927, WSB2 siRNA (m): sc-155362, WSB2 shRNA Plasmid (h): sc-95927-SH, WSB2 shRNA Plasmid (m): sc-155362-SH, WSB2 shRNA (h) Lentiviral Particles: sc-95927-V and WSB2 shRNA (m) Lentiviral Particles: sc-155362-V.

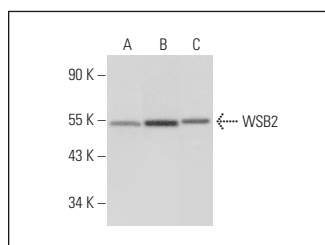
Molecular Weight of WSB2: 45 kDa.

Positive Controls: mouse kidney extract: sc-2255, mouse testis extract: sc-2405 or F9 cell lysate: sc-2245.

## 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



WSB2 (P-12): sc-161262. Western blot analysis of WSB2 expression in mouse kidney (A) and mouse testis (B) tissue extracts and F9 whole cell lysate (C).

## 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.