

# SUHW1 (G-16): sc-86887

## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a krueppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. SUHW1 (suppressor of hairy wing homolog 1), also known as ZNF280A (Zinc-finger protein 280A), 3'OY11.1, ZNF636 or ZNF280, is a 542 amino acid protein that contains four C<sub>2</sub>H<sub>2</sub>-type zinc fingers. Localized to the nucleus, SUHW1 is thought to function as a transcription factor that may mediate transcriptional regulation events.

## REFERENCES

1. Kawasaki, K., et al. 1997. One-megabase sequence analysis of the human immunoglobulin  $\lambda$  gene locus. *Genome Res.* 7: 250-261.
2. Dunham, I., et al. 1999. The DNA sequence of human chromosome 22. *Nature* 402: 489-495.
3. Sun, Y., et al. 2003. The KRAB domain of zinc finger gene ZNF268: a potential transcriptional repressor. *IUBMB Life* 55: 127-131.
4. Nakamura, M., et al. 2004. A novel subfamily of zinc finger genes involved in embryonic development. *J. Cell. Biochem.* 93: 887-895.
5. Englbrecht, C.C., et al. 2004. Conservation, diversification and expansion of C<sub>2</sub>H<sub>2</sub> zinc finger proteins in the *Arabidopsis thaliana* genome. *BMC Genomics* 5: 39-39.
6. O'Geen, H., et al. 2007. Genome-wide analysis of KAP1 binding suggests autoregulation of KRAB-ZNFs. *PLoS Genet.* 3: e89.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF280A (human) mapping to 22q11.22.

## SOURCE

SUHW1 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SUHW1 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-86887 P, (100  $\mu$ g 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

SUHW1 (G-16) is recommended for detection of SUHW1 of 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).

Suitable for use as control antibody for SUHW1 siRNA (h): sc-76606, SUHW1 shRNA Plasmid (h): sc-76606-SH and SUHW1 shRNA (h) Lentiviral Particles: sc-76606-V.

Molecular Weight of SUHW1: 61 kDa.

Positive Controls: human fetal brain tissue extract.

## 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.