

# Odin (S-19): sc-50655

## BACKGROUND

The deduced 1,134-amino acid Odin (ANKS1A) protein plays a putative negative role in growth factor receptor signaling pathways. Odin undergoes phosphorylation on tyrosine residues in response to growth factors EGF and PDGF, but not in response to cytokines, such as IL3 or erythropoietin. The PTB domain of Odin is not required for its tyrosine phosphorylation. Odin is a cytoplasmic protein before and after growth factor treatment, and is widely expressed at the protein level. Odin contains six ANK repeats, one PID domain, and two SAM (sterile  $\alpha$  motif) domains. Overexpression of Odin inhibits EGF-induced activation of the FOS promoter. The gene which encodes Odin, ANKS1A, localizes to chromosome 6p21.31.

## REFERENCES

1. Nagase, T., et al. 1997. Prediction of the coding sequences of unidentified human genes. VI. The coding sequences of 80 new genes (KIAA0201-KIAA0280) deduced by analysis of cDNA clones from cell line KG-1 and brain. *DNA Res.* 3: 321-329, 341-354.
2. Pandey, A., et al. 2002. Cloning of a novel phosphotyrosine binding domain containing molecule, Odin, involved in signaling by receptor tyrosine kinases. *Oncogene* 21: 8029-8036.
3. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608994. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
5. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
6. Kristiansen, T.Z., et al. 2004. Mouse embryonic fibroblasts derived from Odin deficient mice display a hyperproliferative phenotype. *DNA Res.* 11: 285-292.

## CHROMOSOMAL LOCATION

Genetic locus: ANKS1A (human) mapping to 6p21.31; Anks1 (mouse) mapping to 17 A3.3.

## SOURCE

Odin (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Odin 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-50655 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.

## APPLICATIONS

Odin (S-19) is recommended for detection of Odin 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).

Odin (S-19) is also recommended for detection of Odin in additional species, including equine, canine, bovine, porcine and avian.

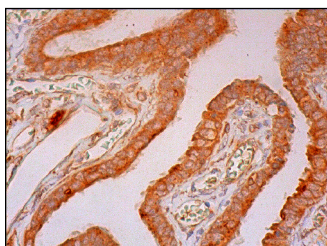
Suitable for use as control antibody for Odin siRNA (h): sc-61256, Odin siRNA (m): sc-61257, Odin shRNA Plasmid (h): sc-61256-SH, Odin shRNA Plasmid (m): sc-61257-SH, Odin shRNA (h) Lentiviral Particles: sc-61256-V and Odin shRNA (m) Lentiviral Particles: sc-61257-V.

Molecular Weight of Odin: 130 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz<sup>™</sup>: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Odin (S-19): sc-50655. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells.

## RESEARCH USE

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

## PROTOCOLS

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