

# Odin (F-9): sc-398547

## 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. 1996. 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™. 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Odin (F-9) is a mouse monoclonal antibody raised against amino acids 731-808 mapping within an internal region of Odin of human origin.

## PRODUCT

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

Odin (F-9) is available conjugated to agarose (sc-398547 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398547 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398547 PE), fluorescein (sc-398547 FITC), Alexa Fluor® 488 (sc-398547 AF488), Alexa Fluor® 546 (sc-398547 AF546), Alexa Fluor® 594 (sc-398547 AF594) or Alexa Fluor® 647 (sc-398547 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398547 AF680) or Alexa Fluor® 790 (sc-398547 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

Odin (F-9) is recommended for detection of Odin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

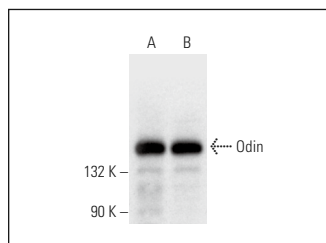
Molecular Weight of Odin: 130 kDa.

Positive Controls: THP-1 cell lysate: sc-2238, A2058 whole cell lysate: sc-364178 or HeLa whole cell lysate: sc-2200.

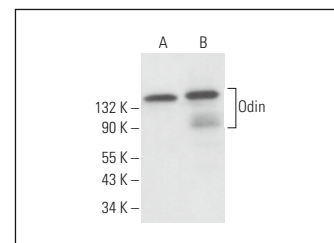
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Odin (F-9): sc-398547. Western blot analysis of Odin expression in A2058 (A) and HeLa (B) whole cell lysates.



Odin (F-9): sc-398547. Western blot analysis of Odin expression in HeLa (A) and THP-1 (B) whole cell lysates.

## 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](http://www.scbt.com) for detailed protocols and support products.