ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Syntenin Antibodies

Cat. # SDB11-P	Rat Syntenin control peptide # 1	**SIZE**: 100 ug
Cat. # SDB11-A	**Rabbit** Anti- Rat Syntenin IgG # 1 (aff pure)	**SIZE**: 100 ug

Na+/ H+ exchanger regulatory factor (**NHERF1**) is a PDZ domain containing adaptor protein known to bind to various receptors, channels, cytoskeletal elements and cytoplasmic signaling proteins. A 358aa mainly expressed in kidney, liver and pancrease by NHERF gene (chrm 17). And is represented in another isoform, NHERF2. NHERF1 protein contains 2 tandem PDZ domains of approximately 90aa and a C-terminal sequence that binds several members of the ERM (ezrin-radixin-moesin) family of membrane cytoskeletal adapters. The protein plays an important role in regulation of NHE3, turnover of G-protein coupled receptors, platelet derived growth factor receptor and ion transporters such as CFTR, Na/Pi cotransporter, NaHCO3 cotransporter and Trp channels.

Syntenin, a 300aa protein in mouse and 298aa each in rat and human, with a mol wt of 32kD. Functions as an adapter protein, play a role in vesicular trafficking and required for the targeting of TGFA to the cell surface in the early secretory pathway. Expressed mainly in fetal kidney, lung, liver and brain, in adult highest expression in heart and placenta. It localizes adheren junctions, focal adhesions and endoplasmic reticulum.

FUNCTION: Seems to function as an adapter protein. In adherens junctions may function to couple syndecans to cytoskeletal proteins or signaling components. Seems to couple transcription factor SOX4 to the IL-5 receptor (IL5RA). May also play a role in vesicular trafficking. Seems to be required for the targeting of TGFA to the cell surface in the early secretory pathway.
SUBCELLULAR LOCATION: Membrane; Peripheral membrane protein (By similarity). Melanosome (By similarity).
SIMILARITY: Contains 2 PDZ (DHR) domains.
Protein name Syntenin-1
Synonym Syndecan-binding protein 1
Gene name Name: Sdcbp

Source of Antigen and Antibodies

Antigen	17-aa peptide from Rat Syntenin; (protein accession #Q9JI92 , refs 1) **Designation (SDB11-P, control peptide**) conjugated to KLH; Epitope location ~C-terminus
Ab Host/type	Rabbit, Polyclonal, Aff pure IgG (**cat # SDB11-A**) purified over the antigen column
2-ab	**Goat Anti-rabbit IgG-HRP** cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)
100ul solution lyophilized powder
Supplied in Buffer: 0.05% azide
Reconstitute powder in 100 ul PBS

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer**: PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage
Short-term: unopened, undiluted liquid vials at 20°C and powder at 4°C or -20°C..

Long-term: at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20°C or below.
Shipping: 4°C for solutions and room temp for powder

Recommended Usage

Western Blotting (1-10 ug/ml for affinity pure antibody using ECL technique).

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).
Histochemistry & Immunofluorescence: Not tested. We recommend the use of aff pure IgG at 2-20 ug/ml.

Specificity & Cross-reactivity

The Rat SDB11-P control peptide is 100% identical in human, mouse, monkey, chimp, 81% in chicken, 68% in xenopus, and 85% in zebra fish syntenin. Antibody cross-reactivity in various species has not been studied. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity

General References: Mehrdad Jannatipour et al (2001) JBC Vol.276 (35) 33093-33100; Fernandez-Larrea et al (1999) Molec. Cell 3: 423-433; Geijsen, N et al (2001) Science 293, 1136-1138; Grootjans, J. J et al (1997) PNAS 94: 13683-13688.

*This product is for In vitro research use only.

Related material available from ADI

Antibodies and Peptides: NHERF isoforms, Merlin (Sch) isoforms, and Syntenin.

SDB11-A-P 709113J

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