#### sigma-aldrich.com

3050 Spruce Street, St. Louis, MO 63103 USA Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757 email: techservice@sial.com sigma-aldrich.com

# **Product Information**

## Anti-SND1

produced in rabbit, affinity isolated antibody

Catalog Number SAB4200470

### **Product Description**

Anti-SND1 is produced in rabbit using as immunogen a peptide corresponding to an internal region of human SND1 (GeneID: 27044), conjugated to KLH. The corresponding sequence differs by a single amino acid in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-SND1 recognizes human, rat and mouse SND1. The antibody may be used in various immunochemical techniques including immunoblotting (~102 kDa), immunoprecipitation and immunofluorescence. Detection of the SND1 band by immunoblotting is specifically inhibited by the immunizing peptide.

Tudor-SN, also called SND1 or p100, has been shown to be involved in the regulation of transcription and RNA biogenesis. SND1 protein is highly conserved from yeast to human. SND1 contains five repeated staphylococcal nuclease-like domains and a Tudor-like domain, probably required for its interaction with nucleic acids and proteins, respectively. SND1 is a component of the RNA-induced silencing complex (RISC). SND1 promotes the degradation of hyperedited inosine-containing miRNA precursors. It modulates miRNA processing and expression through RNA editing by ADAR (adenosine deaminase acting on RNA). SND1 is upregulated in human colon cancer tissues and cell lines.<sup>1-4</sup>

### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

### **Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

### **Product Profile**

<u>Immunoblotting</u>: a working concentration of 0.25-0.5  $\mu$ g/mL is recommended using whole extracts of mouse NIH-3T3 cells.

Immunoprecipitation: a working amount of 1-2  $\mu$ g is recommended using lysates of rat NRK cells.

<u>Immunofluorescence</u>: a working concentration of 2.5-5.0  $\mu$ g/mL is recommended using human HeLa cells.

**Note**: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

#### References

- 1. Tsuchiya, N., et al., *Cancer Res.*, **67**, 9568-9576 (2007).
- Li, C.L., et al., Nucleic Acids Res., 36, 3579-3589 (2008).
- 3. Garcia-Arcos, I., et al., *J. Physiol. Biochem.*, **66**, 73-83 (2010).
- 4. Saarikettu, J., et al., *Hybridoma*, **29**, 231-236 (2010).

ST,RC,PHC 07/12-1

©2012 Sigma-Aldrich Co. LLC. All rights reserved. SIGMA-ALDRICH is a trademark of Sigma-Aldrich Co. LLC, registered in the US and other countries. Sigma brand products are sold through Sigma-Aldrich, Inc. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see product information on the Sigma-Aldrich website at www.sigmaaldrich.com and/or on the reverse side of the invoice or packing slip.