

**Datasheet for 600-401-CY7****NANOS1 Antibody****Overview**

|                      |                                             |
|----------------------|---------------------------------------------|
| <b>Description:</b>  | Anti-NANOS1 (RABBIT) Antibody - 600-401-CY7 |
| <b>Item No.:</b>     | 600-401-CY7                                 |
| <b>Size:</b>         | 100 µg                                      |
| <b>Applications:</b> | ELISA, IF, IHC, WB                          |
| <b>Reactivity:</b>   | Human                                       |
| <b>Host Species:</b> | Rabbit                                      |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Nanos1 is one of three known mammalian homologs to the Drosophila gene nanos. Nanos1 is an RNA-binding protein containing a zinc-finger motif and is expressed in the developing nervous system and continues in the adult brain. Interestingly, unlike mice deficient in either nanos2 or nanos3, mice lacking the nanos1 gene develop normally with no sign of abnormalities. Recently it has been found that expression of nanos1 mRNA is down-regulated by E-cadherin in a human breast cancer cell line and the amino-terminal domain on Nanos1 interacts with the E-cadherin-binding protein p120ctn. Furthermore, overexpression of Nanos1 in human colorectal DLD1 cancer cells functionally abolished cell-cell adhesion, allowing the cancer cells to develop strong migratory and invasive properties. These results suggest that targeting Nanos1 might prove an effective strategy in the treatment of E-cadherin-negative tumors. |
| <b>Synonyms:</b>     | Nanos1 Antibody, NOS1, SPGF12, NOS1, Nanos homolog 1, NOS-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

**Target Details**

|                        |                    |
|------------------------|--------------------|
| <b>Gene Name:</b>      | NANOS1             |
| <b>Reactivity:</b>     | Human              |
| <b>Immunogen Type:</b> | Conjugated Peptide |

|                            |                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen:</b>          | Anti-Nanos1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid synthetic peptide from near the N-terminus of human Nanos1.     |
| <b>Purity/Specificity:</b> | Anti-Nanos1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Nanos1 from other sources has not been determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q8WY41</a></li><li>• <a href="#">GeneID - 340719</a></li><li>• <a href="#">NCBI - Q8WY41</a></li></ul>            |

## Application Details

|                             |                                                                                                                                                                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, IF, IHC, WB                                                                                                                                                                                                                                                                         |
| <b>Application Note:</b>    | Anti-Nanos1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 30 kDa in Western Blots of specific cell lysates and tissues. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                            |
| <b>ELISA:</b>               | 1:10,000                                                                                                                                                                                                                                                                                   |
| <b>IF:</b>                  | 20 µg/mL                                                                                                                                                                                                                                                                                   |
| <b>IHC:</b>                 | 2.5 µg/mL                                                                                                                                                                                                                                                                                  |
| <b>WB:</b>                  | 1 µg/mL                                                                                                                                                                                                                                                                                    |

## Formulation

|                        |                                                         |
|------------------------|---------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                               |
| <b>Concentration:</b>  | 1 mg/mL by UV absorbance at 280 nm                      |
| <b>Buffer:</b>         | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.02% (w/v) Sodium Azide                                |
| <b>Stabilizer:</b>     | None                                                    |

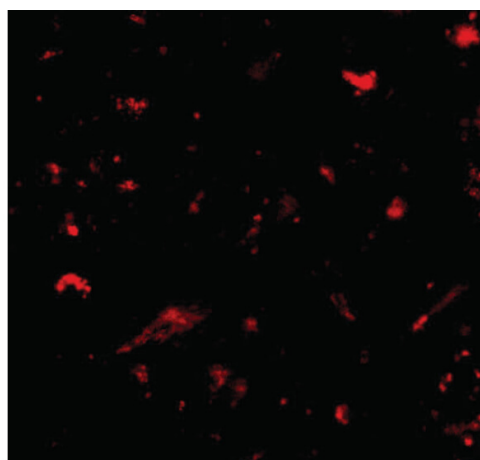
## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

**Storage Condition:** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

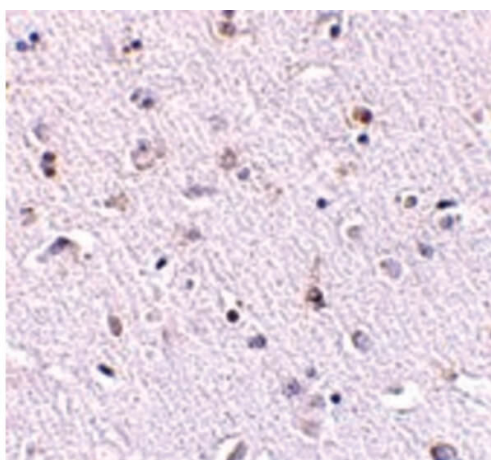
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



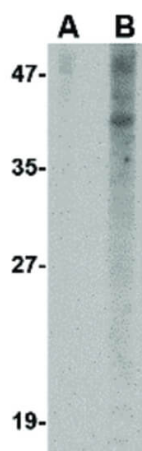
### Immunofluorescence Microscopy

Immunofluorescence Microscopy of Nanos1 antibody.  
Tissue: Human brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Nanos1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: Nanos1 as red fluorescent signal.



### Immunohistochemistry

Immunohistochemistry of Nanos1 antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Nanos1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Nanos1 is nuclear and occasionally cytoplasmic. Staining: Nanos1 as a precipitated red signal with hematoxylin purple nuclear counterstain.

**Western Blot**

Western Blot of Nanos1 antibody. Lane A: SK-N-SH cell lysate in the presence of blocking peptide. Lane B: SK-N-SH cell lysate in the absence of blocking peptide. Load: 35 µg per lane. Primary Antibody: Anti-Nanos at 1 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 30.2 kDa, ~40 kDa for Nanos1.

**Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.