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www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-CZ0

NANOS2 Antibody

Overview

Description:	Anti-NANOS2 (RABBIT) Antibody - 600-401-CZ0
Item No.:	600-401-CZ0
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Nanos is a zinc-finger containing, RNA-binding protein that has been implicated in germ cell development in both invertebrates and vertebrates. In Drosophila, Nanos represses apoptosis during development to ensure proper germ-line development. Unlike Nanos1 whose expression in mice is dispensable, the Nanos2 and Nanos3 proteins are required for germ cell development. Nanos2-null primordial germ cells (PGCs) die only in the male gonads and show no defects in females, while Nanos3-null PGCs are lost during the migration stage regardless of sex. Nanos2 and Nanos3 have distinct expression patterns during embryo development, suggesting that these two proteins do not have redundant functions. However, expression of Nanos2 can at least partially replace Nanos3 function in a Nanos3-null background. Nanos3 expression can not rescue Nanos2-null defects. This Nanos2 antibody will not cross-react with either Nanos 1 or Nanos3.
Synonyms:	Nanos2 Antibody, NOS2, NOS2, Nanos homolog 2, NOS-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	NANOS2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Nanos2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 13 amino acid synthetic peptide near the N-terminus of the human Nanos2.
Purity/Specificity:	Anti-Nanos2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Nanos2 from other sources has not been determined.
Relevant Links:	• UniProtKB - P60321 • GeneID - 339345 • NCBI - P60321

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-Nanos2 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 15 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1-2 µg/mL

Formulation

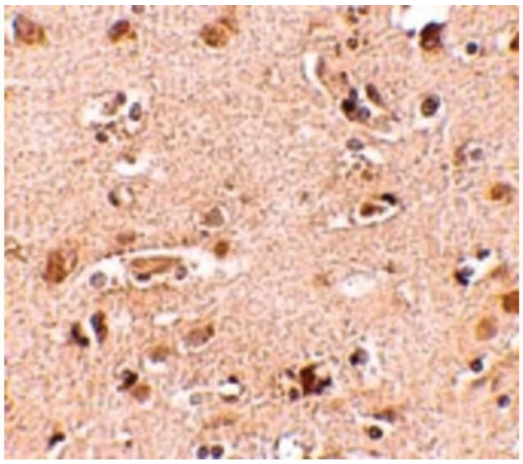
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

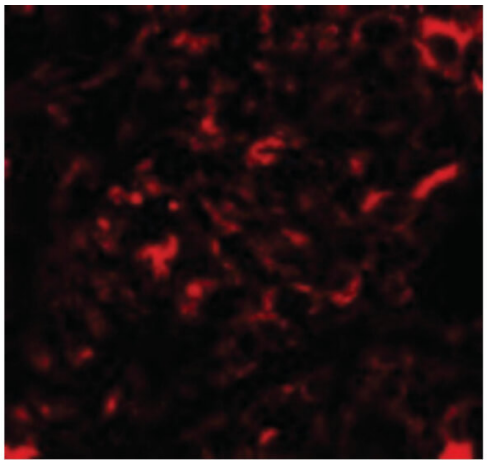
Shipping Condition:	Dry Ice

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.

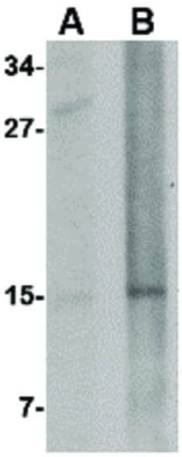
Images



Immunohistochemistry
Immunohistochemistry of Nanos2 antibody. Tissue: Human brain tissue cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Nanos2 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: Nanos2 is nuclear and occasionally cytoplasmic. Staining: Nanos2 as a precipitated red signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Nanos2 antibody. Tissue: Human testis cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Nanos2 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: Nanos2 as a red fluorescent signal.



Western Blot

Western Blot of Nanos2 antibody. Lane A: Rat brain tissue lysate at 1 µg/mL. Lane B: Rat brain tissue lysate at 2 µg/mL. Load: 35 µg per lane.
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: 15.1 kDa, ~15 kDa for Nanos2.

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