

Datasheet for 600-401-GG8**ZSCAN4 Antibody****Overview**

Description:	Anti-ZSCAN4 (RABBIT) Antibody - 600-401-GG8
Item No.:	600-401-GG8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Zytotic genome activation (ZGA) is the first and most critical transition event from the maternal genetic to the embryonic genetic program and the major burst of ZGA occurs only in the late 2-cell stage. ZSCAN4 encodes a SCAN domain and four zinc finger domains and is expressed in late 2-cell embryos and embryonic stem cells. Loss-of-function studies using siRNA shows delays in the progression from the 2-cell to the 4-cell stage and subsequent embryo development. ZSCAN4 plays an important role in the preimplantation development. Also, ZSCAN4 is involved in telomere maintenance and long term genomic stability in ES cells, suggesting that ZSCAN4 may be of critical importance in maintaining pluripotency in replicating stem cells.
Synonyms:	ZSCAN4 Antibody, ZNF494, ZNF494, Zinc finger and SCAN domain-containing protein 4, Zinc finger protein 494
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ZSCAN4
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-ZSCAN4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 18 amino acid synthetic peptide near the C-terminus of human ZSCAN4.

Purity/Specificity: Anti-ZSCAN4 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ZSCAN4 from other sources has not been determined.

Relevant Links:

- [UniProtKB - Q8NAM6](#)
- [GeneID - 201516](#)
- [NCBI - NP_689890.1](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-ZSCAN4 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 49 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: User Optimized

IF: 20 µg/mL

IHC: 5 µg/mL

WB: 1 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1.0 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

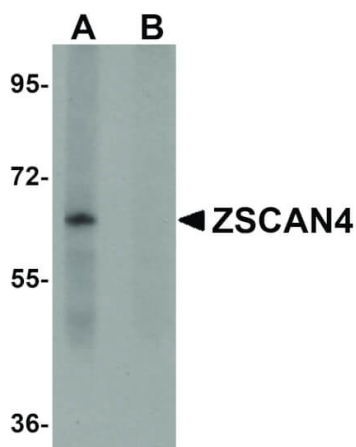
Shipping Condition: Wet Ice

Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

Expiration:

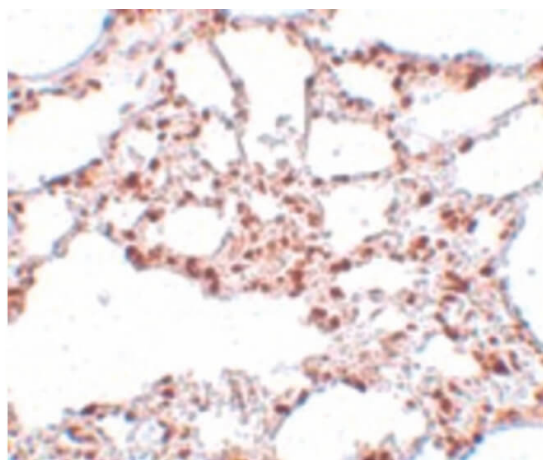
Expiration date is one (1) year from date of receipt.

Images



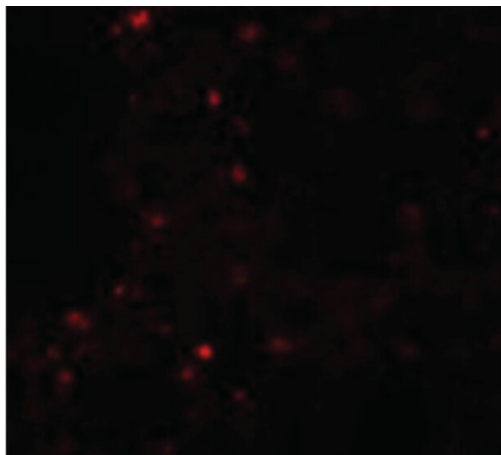
Western Blot

Western Blot of ZSCAN4 antibody. Lane 1: Mouse lung tissue lysate in the absence of blocking peptide. Lane 2: Mouse lung tissue lysate in the presence of blocking peptide. Primary Antibody: Anti-ZSCAN4 antibody 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: 49 kDa, 69 kDa for ZSCAN4. Other band(s): ZSCAN4 splice variants and isoforms.



Immunohistochemistry

Immunohistochemistry of ZSCAN4 antibody. Tissue: Rat lung tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: ZSCAN4 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: ZSCAN4 is nuclear. Staining: ZSCAN4 as precipitated brown signal with blue nuclear counterstain.

**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of ZSCAN4 antibody.

Tissue: Rat lung cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: ZSCAN4 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.

Localization: ZSCAN4 is nuclear. Staining: ZSCAN4 as red fluorescent signal.

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.