

Datasheet for 600-401-GE6**ZIP14 Antibody****Overview**

Description:	Anti-ZIP14 (RABBIT) Antibody - 600-401-GE6
Item No.:	600-401-GE6
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The zinc transporter ZIP14, also known as SLC39A14, is a member of a family of divalent ion transporters. Zinc is an essential ion for cells and plays significant roles in the growth, development, and differentiation. The zinc transporter family is divided into four subfamilies (I, II, LIV-1 and gufA). ZIP14 is a glycosylated multipass plasma membrane protein that belongs to the ZIP transporter subfamily LIV-1. ZIP14 has been shown to contribute to the hypozincemia of inflammation and infection and is regulated in the liver by IL-6. In addition to zinc, ZIP14 is also involved in the cellular uptake of non-transferrin-bound iron as well as iron bound to transferrin.
Synonyms:	ZIP14 Antibody, NET34, ZIP14, cig19, LZT-Hs4, KIAA0062, Zinc transporter ZIP14, LIV-1 subfamily of ZIP zinc transporter 4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SLC39A14
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-ZIP14 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide near the internal region of human ZIP14. The immunogen is located within amino acids 230-280 of ZIP14.

Purity/Specificity:	Anti-ZIP14 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least three isoforms of ZIP14 are known to exist; this antibody will detect both isoforms. ZIP14 antibody is predicted to not cross-react with other ZIP family members.
Relevant Links:	• UniProtKB - Q15043 • GeneID - 23516 • NCBI - NP_001121903.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ZIP14 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 54 kDa, observed ~52kDa in Western Blots of specific cell lysates and tissues. Postive control: human liver tissue, mouse kidney tissue, rat kidney tissue.
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:	1-2 µg/mL
WB:	1-4 µg/mL

Formulation

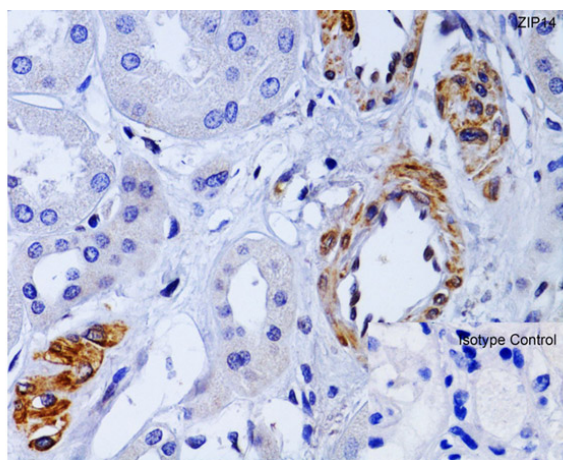
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures

Expiration:

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

Images**Immunohistochemistry**

Immunohistochemistry Validation of ZIP14.

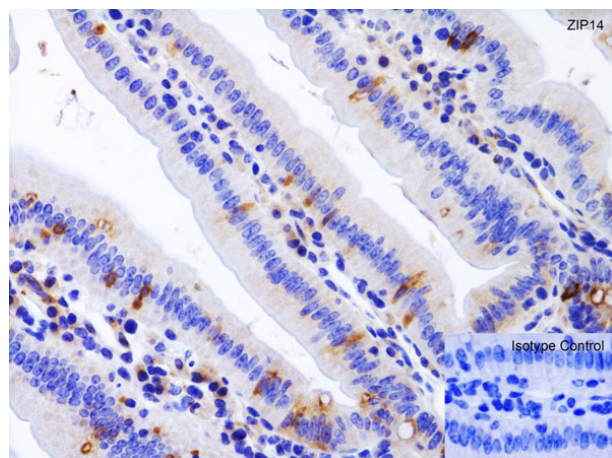
Tissue: human kidney tissue.

Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-ZIP14 antibody at 1 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.

**Immunohistochemistry**

Immunohistochemistry Validation of ZIP14.

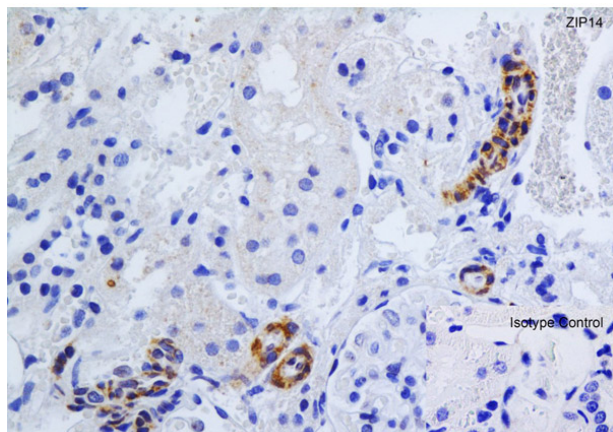
Tissue: mouse colon tissue.

Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-ZIP14 antibody at 1 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.



Immunohistochemistry

Immunohistochemistry Validation of ZIP14.

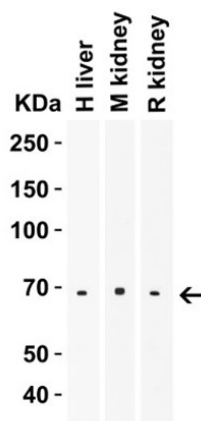
Tissue: rat kidney tissue.

Fixation: paraffin-embedded, formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-ZIP14 antibody at 2 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250. Counter stained with Hematoxylin.



Western Blot

Western blot of ZIP14.

Loading: 10 µg of human, mouse, or rat lysates. Lane 1:

human liver, Lane 2: mouse kidney, Lane 3: rat kidney.

Primary antibody: Anti-ZIP14 at 2µg/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.

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.