

Datasheet for 600-401-GF2**ZIP7 Antibody****Overview**

Description:	Anti-ZIP7 (RABBIT) Antibody - 600-401-GF2
Item No.:	600-401-GF2
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The zinc transporter ZIP7, also known as SLC39A7, 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. ZIP7 was initially identified while characterizing genes in the major histocompatibility complex on chromosome 17. ZIP7 mRNA is abundantly and widely expressed and the protein localizes to the Golgi apparatus. It functions to transport intracellular zinc from the Golgi apparatus to the cytoplasm of the cell. ZIP7 expression is expressed by zinc. ZIP7 has been suggested to act a hub for tyrosine kinase activation and may thus be a potential therapeutic target for diseases such as cancer where prevention of tyrosine kinase activation would be advantageous.
Synonyms:	ZIP7 Antibody, KE4, HKE4, ZIP7, RING5, H2-KE4, D6S115E, D6S2244E, Zinc transporter SLC39A7, Histidine-rich membrane protein Ke4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SLC39A7
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-ZIP7 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid synthetic peptide near the N-terminus of human ZIP7.
Purity/Specificity:	Anti-ZIP7 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with ZIP7 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q92504 • GeneID - 7922 • NCBI - NP_001070984.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-ZIP7 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 50 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:	1:5000 - 1:10000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	0.5-1 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

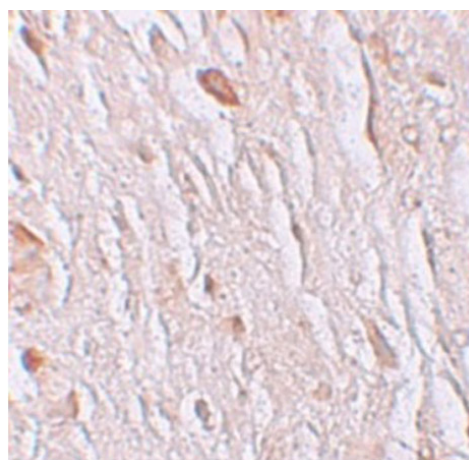
Shipping & Handling

Shipping Condition:	Dry Ice
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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 Validation of ZIP7.

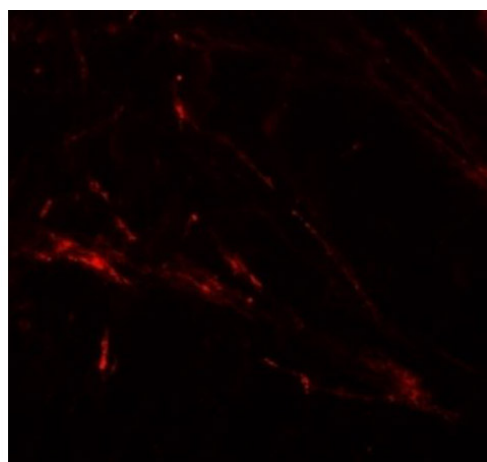
Tissue: Human Brain Tissue.

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-ZIP7 antibody (6093) at 2.5 µg/ml overnight at 4°C.

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



Immunofluorescence Microscopy

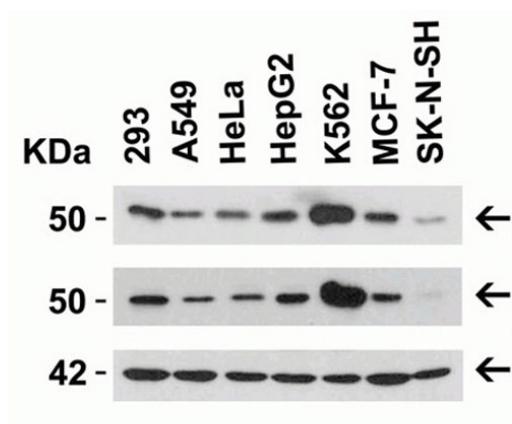
Immunofluorescence Validation of ZIP7.

Tissue: Human Brain Tissue.

Fixation: 4% paraformaldehyde-fixed.

Primary Antibody: Anti-ZIP7 at 20 µg/mL

Secondary Antibody: goat anti-rabbit IgG antibody at 1:500 dilution (red).



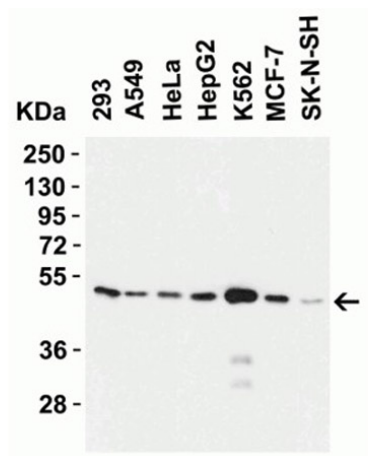
Western Blot

Independent Antibody Validation of ZIP7 via Protein Expression.

Loading: 15 μ g of human cell lysates per lane. Lane 1: 293, Lane 2: A549, Lane 3: HeLa, Lane 4: HepG2, Lane 5: K562, Lane 6: MCF-7, Lane 7: SK-N-SH.

Primary antibody: Anti-ZIP7 (p/n 600-401-GF2 top blot) at 1 μ g/mL, anti-ZIP7 (middle blot) at 4 μ g/mL, and anti-beta-actin (bottom blot) at 1 μ g/mL for 1h incubation at RT in 5% NFDN/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



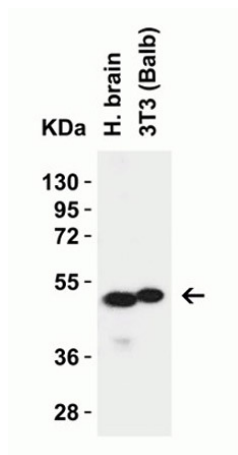
Western Blot

Western Blot of ZIP7.

Loading: 15 μ g of human cell lysates per lane. Lane 1: 293, Lane 2: A549, Lane 3: HeLa, Lane 4: HepG2, Lane 5: K562, Lane 6: MCF-7, Lane 7: SK-N-SH.

Primary antibody: Anti-ZIP7 at 1 μ g/mL for 1h incubation at RT in 5% NFDN/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



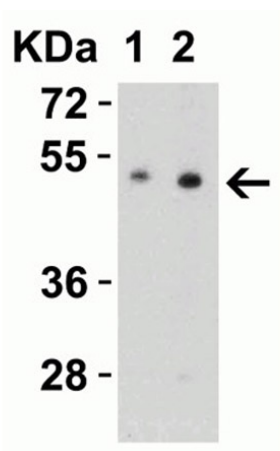
Western Blot

Western Blot of ZIP7.

Loading: 15 μ g of lysates per lane. Lane 1: Human Brain Tissue, Lane 2: 3T3 (Balb) Cell Lysate.

Primary antibody: Anti-ZIP7 1 μ g/mL at 1h incubation at RT in 5% NFDN/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



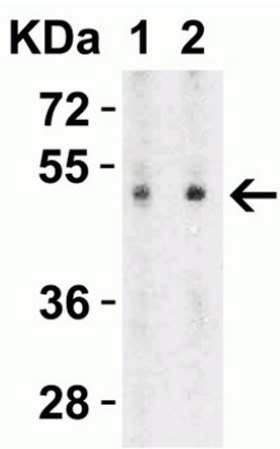
Western Blot

Western Blot of ZIP7.

Loading: 15 µg of Mouse Brain Tissue lysates per lane.

Primary antibody: Anti-ZIP7 at (Lane 1: 0.5 µg/mL and Lane 2: 1 µg/mL) for 1h incubation at RT in 5% NFDN/TBST.

Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot

Western Blot of ZIP7.

Loading: 15 µg of rat brain lysates per lane.

Primary antibody: Anti-ZIP7 at (Lane 1: 0.5 µg/mL and Lane 2: 1 µg/mL) for 1h incubation at RT in 5% NFDN/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.