

# Product Datasheet

## SLC39A5 Antibody - Azide and BSA Free NBP3-04949-100ul

Unit Size: 100 ul

Store at -20C. Avoid freeze-thaw cycles.

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**NBP3-04949-100ul**

SLC39A5 Antibody - Azide and BSA Free

<b>Product Information</b>	
<b>Unit Size</b>	100 ul
<b>Concentration</b>	Please see the vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at -20C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.01% Thimerosal
<b>Isotype</b>	IgG
<b>Purity</b>	Affinity purified
<b>Buffer</b>	PBS (pH 7.3), 50% glycerol
<b>Target Molecular Weight</b>	56 kDa
<b>Product Description</b>	
<b>Description</b>	Novus Biologicals Rabbit SLC39A5 Antibody - Azide and BSA Free (NBP3-04949) is a polyclonal antibody validated for use in WB. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Rabbit
<b>Gene ID</b>	283375
<b>Gene Symbol</b>	SLC39A5
<b>Species</b>	Human, Mouse, Rat
<b>Immunogen</b>	Recombinant fusion protein containing a sequence corresponding to amino acids 305-385 of human SLC39A5 (NP_775867.2). LGLLRHRGLRPRCCRKRNRNLETRNLDPENGS GMALQPLQAAPEPGAQQQR EKNSQHPPALAPPGHQGHSHGHQGGTDITW
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot
<b>Recommended Dilutions</b>	Western Blot 1:500-1:2000



## Images

Glucose is the main driver of sucrose-induced dysregulation of intestinal epithelial barrier function. (A) Following 24 h of glucose (G), fructose (F), and GF treatments, FITC-Dextran (green) fluorescence intensity within the enteroid was quantified by software ImageJ. Values are means  $\pm$  SEM; # of enteroid counted: mock, n = 322; GF, n = 293; G, n = 278; F, n = 253. One-way ANOVA. (B) Representative western analyses from two independent experiments showed ZIP14, ZIP4, and ZIP5 transporters.

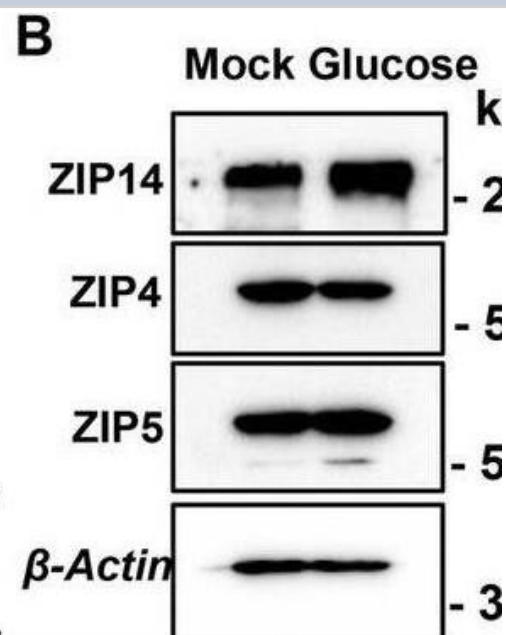
(C) Cellular location of ZIP14 at the basolateral side of the intestinal epithelium was shown in the mouse enteroid system. Images were obtained using Zeiss LSM880 confocal inverted microscope. Green: DAPI; red: ZIP14. (D) Depiction of the proposed mechanism of G or F-induced permeability. (E) Following 24 h of glucose (G) alone or combined with zinc treatments, FITC-Dextran (green) fluorescence intensity within the enteroid was quantified by software ImageJ. Values are means  $\pm$  SEM; # of enteroid counted: (G), n = 102; G + zinc (Zn), n = 111. (F) Zinc levels in intestinal epithelial cells were measured by MP-AES. (G,H) Intestinal permeability was assessed by FITC-Dextran and western blot analysis for TJP. Following 8 weeks of sucrose treatment the body weight (I) % body fat (J) and blood glucose levels were measured from floxed control and intestine-specific Zip14 KO (IKO-ZIP14 is deleted from villin-expressing cells) mice. Values are means  $\pm$  SEM. n = 6–8 mice per group. The unpaired t-test between sucrose-treated floxed and IKO mice. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/37637953>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

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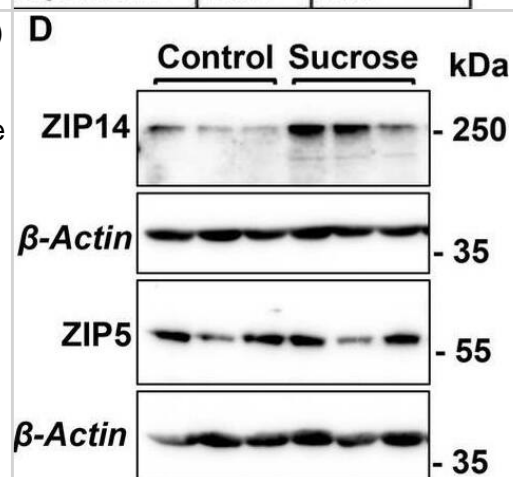
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Subchronic liquid sucrose treatment alters intestinal zinc metabolism. (A) Zinc concentration in intestinal epithelial cells (IEC) using MP-AES. IECs were separated and digested in nitric acid. Total protein concentrations were used for normalization. (B,C) Following the morning fast, mice were administered  $^{65}\text{Zn}$  via either gavage (B) or subcutaneous injection (C). Three hours later, the amount of radioactivity in intestine tissue was measured. (D) Representative western analyses show intestinal ZIP5 and ZIP14 protein levels from control and sucrose-fed mice (n = 3 mice per group). (E) Depiction of proposed intestinal zinc transporter and zinc regulation based on the data in A–D. Values are means  $\pm$  SEM; n = 4–7. Unpaired t-test between control and sucrose-treated groups. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/37637953>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

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Change	Mock	Glucose
14/ $\beta$ -Actin	100	157
4/ $\beta$ -Actin	100	102
5/ $\beta$ -Actin	100	110





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### **Products Related to NBP3-04949-100ul**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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