

# Product Datasheet

## EI24 Antibody - BSA Free NBP2-13949

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

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**NBP2-13949**

EI24 Antibody - BSA Free

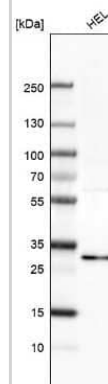
Product Information	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.02% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Affinity purified
<b>Buffer</b>	PBS (pH 7.2) and 40% Glycerol

Product Description	
<b>Description</b>	Novus Biologicals Rabbit EI24 Antibody - BSA Free (NBP2-13949) is a polyclonal antibody validated for use in IHC, WB and ICC/IF. Anti-EI24 Antibody: Cited in 1 publication. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Rabbit
<b>Gene ID</b>	9538
<b>Gene Symbol</b>	EI24
<b>Species</b>	Human
<b>Immunogen</b>	This antibody was developed against a recombinant protein corresponding to the amino acids: GIKDSIWGICTISKLDARIQQKREEQRRRRASSVLAQRRRAQSIERKQESEPRIVS RI

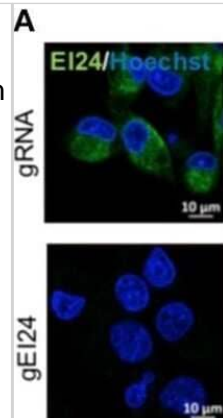
Product Application Details	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
<b>Recommended Dilutions</b>	Western Blot 0.04-0.4 ug/ml, Immunohistochemistry 1:50 - 1:200, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1:50 - 1:200
<b>Application Notes</b>	For IHC-Paraffin, HIER pH 6 retrieval is recommended. Use in ICC/IF was reported in scientific literature (PMID: 31396480).

**Images**

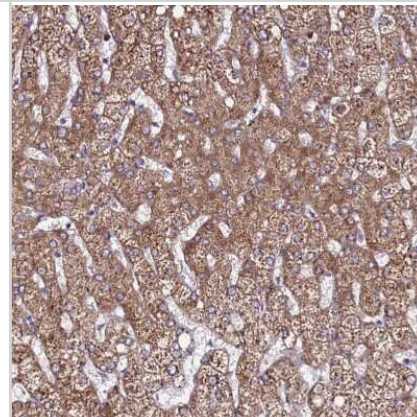
Western Blot: EI24 Antibody [NBP2-13949] - Analysis in human cell line HEL.



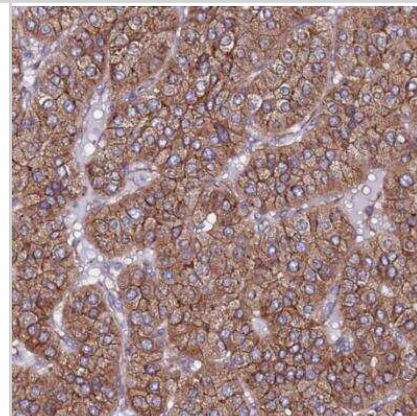
Immunocytochemistry/Immunofluorescence: EI24 Antibody [NBP2-13949] - Loss of EI24 expression using CRISPR-Cas9 in MIA PaCa-2 cells decreased cell proliferation. MIA PaCa-2 cells were transfected with CRISPR-Cas9 control (gRNA) and EI24 gRNA (gEI24) using a lentiviral system. After 48 h of incubation, EI24 protein expression was observed by immunofluorescence staining using an anti-EI24 antibody. Image collected and cropped by CiteAb from the following publication (<https://www.frontiersin.org/article/10.3389/fonc.2019.00652/full>), licensed under a CC-BY license.



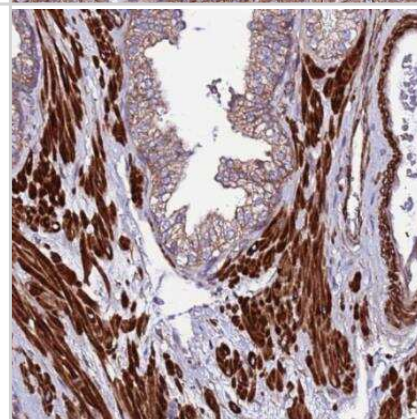
Immunohistochemistry-Paraffin: EI24 Antibody [NBP2-13949] - Staining of human liver shows strong cytoplasmic granular positivity in hepatocytes.



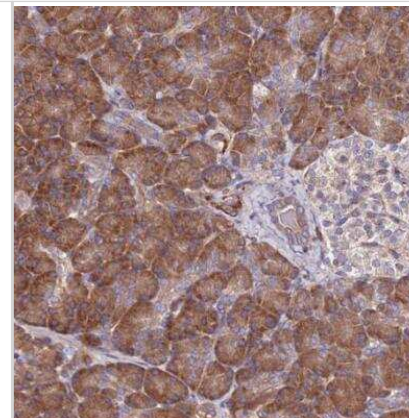
Immunohistochemistry-Paraffin: EI24 Antibody [NBP2-13949] - Staining of human parathyroid gland shows strong cytoplasmic granular positivity in glandular cells.



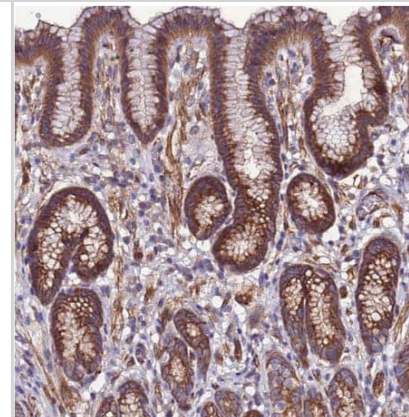
Immunohistochemistry-Paraffin: EI24 Antibody [NBP2-13949] - Staining of human prostate shows strong cytoplasmic positivity in smooth muscle cells.



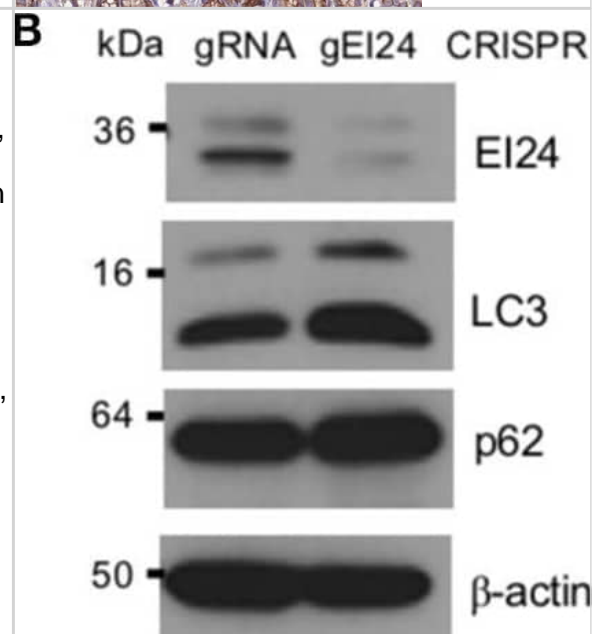
Immunohistochemistry-Paraffin: EI24 Antibody [NBP2-13949] - Staining of human pancreas shows strong cytoplasmic granular positivity in exocrine glandular cells.



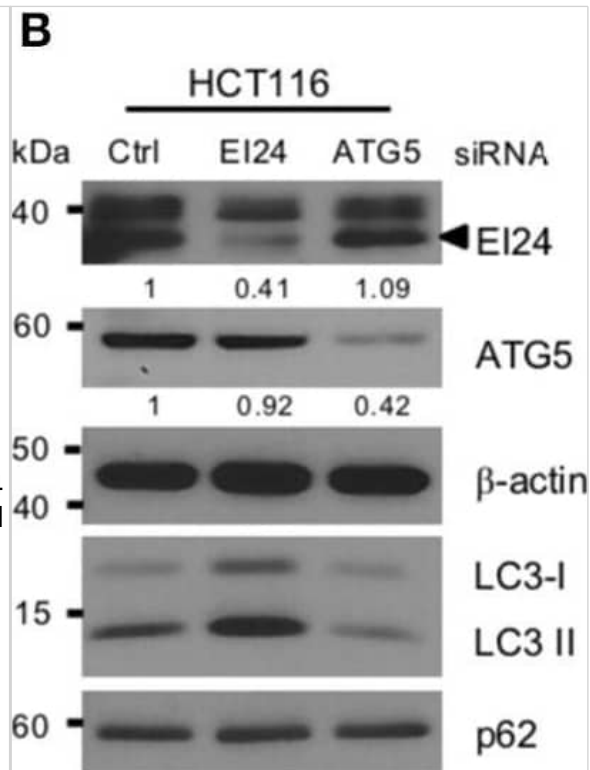
Immunohistochemistry-Paraffin: EI24 Antibody [NBP2-13949] - Staining of human stomach shows strong cytoplasmic granular positivity in glandular cells.



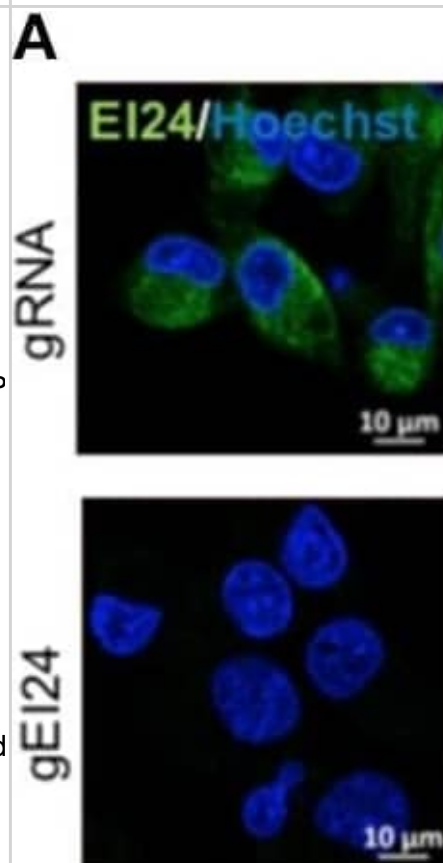
Western Blot: EI24 Antibody [NBP2-13949] - Loss of EI24 expression using CRISPR-Cas9 in MIA PaCa-2 cells decreased cell proliferation. MIA PaCa-2 cells were transfected with CRISPR-Cas9 control (gRNA) & EI24 gRNA (gEI24) using a lentiviral system. (A) After 48 h of incubation, EI24 protein expression was observed by immunofluorescence staining using an anti-EI24 antibody. (B) After 48 h of incubation, the EI24 protein level was observed by western blotting using an anti-EI24 antibody. Conversion of LC3-I to LC3-II & p62 accumulation were analyzed by western blotting using anti-LC3 & anti-p62 antibodies, respectively. Graphs represent the mean  $\pm$  SEM of EI24, LC3-II, & p62 densitometry value to that of  $\beta$ -actin (with gRNA values set to 1) from three independent experiments. Comparison were made using Student's t-test, \*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001. (C) After 24 h of incubation, cells were seeded into a 96-well plate (1,000 cells/well). Images acquired by the IncuCyte instrument at the indicated times were analyzed using the ZOOM 2016 program. Confluency was measured in triplicate wells for each sample. Values represent the means  $\pm$  SEM (Student's t-test, \*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001). (D) Control & EI24 gRNA-transfected cells ( $5 \times 10^6$ ) were injected into both flanks of Balb/c nude mice. Tumor volume was measured on the indicated days. The y-axes of these graphs represent the fold change in tumor size relative to the initial tumor size. Values represent means  $\pm$  SEM. (Student's t-test, n.s., not significant, control gRNA mice, n = 5; EI24 gRNA mice, n = 4). Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31396480>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: EI24 Antibody [NBP2-13949] - Loss of EI24 expression in HCT116 cells impairs autophagy but not cell proliferation. HCT116 cells were transfected with 10 nM control siRNA (siCtrl) or siRNA targeting EI24 or ATG5. (A) The mRNA levels of EI24, ATG5, & GAPDH were analyzed by reverse-transcription PCR. (B) The protein levels of EI24, ATG5 &  $\beta$ -actin were analyzed by western blotting. Representative data are shown. Values represent the ratio of the EI24 or ATG5 densitometry value to that of  $\beta$ -actin (with siCtrl values set to 1). Conversion of LC3-I to LC3-II & p62 accumulation were analyzed by western blotting using anti-LC3 & anti-p62 antibodies, respectively. Graphs represent mean  $\pm$  SEM of the LC3-II & p62 densitometry value to that of  $\beta$ -actin (with siCtrl values set to 1) from three independent experiments. Comparison were made using Student's t-test, \* $P < 0.05$ ; \*\* $P < 0.01$ . (C) After 24 h of transfection, cells were seeded into a 6-well plate & incubated for another 7 days. Cells were fixed & stained with crystal violet. (D) After 24 h of transfection, cells were seeded into a 96-well plate. Images acquired from the IncuCyte instrument at the indicated times were analyzed using the ZOOM 2016 program. Cell confluency was measured in triplicate wells for each sample. The plotted values represent means  $\pm$  SEM. (E) Protein extracts from siRNA-transfected cells were analyzed for DNA fragmentation. The y-axes of the graphs indicate the extent of DNA fragmentation. Values plotted in the graphs represent means  $\pm$  SEM (Student's t-test, n.s., not significant). Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31396480>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Loss of EI24 expression using CRISPR-Cas9 in MIA PaCa-2 cells decreased cell proliferation. MIA PaCa-2 cells were transfected with CRISPR-Cas9 control (gRNA) and EI24 gRNA (gEI24) using a lentiviral system. (A) After 48 h of incubation, EI24 protein expression was observed by immunofluorescence staining using an anti-EI24 antibody. (B) After 48 h of incubation, the EI24 protein level was observed by western blotting using an anti-EI24 antibody. Conversion of LC3-I to LC3-II and p62 accumulation were analyzed by western blotting using anti-LC3 and anti-p62 antibodies, respectively. Graphs represent the mean  $\pm$  SEM of EI24, LC3-II, and p62 densitometry value to that of  $\beta$ -actin (with gRNA values set to 1) from three independent experiments. Comparison were made using Student's t-test, \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ . (C) After 24 h of incubation, cells were seeded into a 96-well plate (1,000 cells/well). Images acquired by the IncuCyte instrument at the indicated times were analyzed using the ZOOM 2016 program. Confluency was measured in triplicate wells for each sample. Values represent the means  $\pm$  SEM (Student's t-test, \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ ). (D) Control and EI24 gRNA-transfected cells ( $5 \times 10^6$ ) were injected into both flanks of Balb/c nude mice. Tumor volume was measured on the indicated days. The y-axes of these graphs represent the fold change in tumor size relative to the initial tumor size. Values represent means  $\pm$  SEM. (Student's t-test, n.s., not significant, control gRNA mice,  $n = 5$ ; EI24 gRNA mice,  $n = 4$ ). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/31396480>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Hwang M, Jun DW, Kang EH et al. EI24, as a Component of Autophagy, Is Involved in Pancreatic Cell Proliferation Front Oncol 2019-07-23 [PMID: 31396480] (ICC/IF, Human)



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General: novus@novusbio.com

### **Products Related to NBP2-13949**

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NBP2-13949PEP	EI24 Recombinant Protein Antigen
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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