

Product Datasheet

ELF3/ESE-1 Antibody - BSA Free NBP1-30873

Unit Size: 100 ul

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

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NBP1-30873

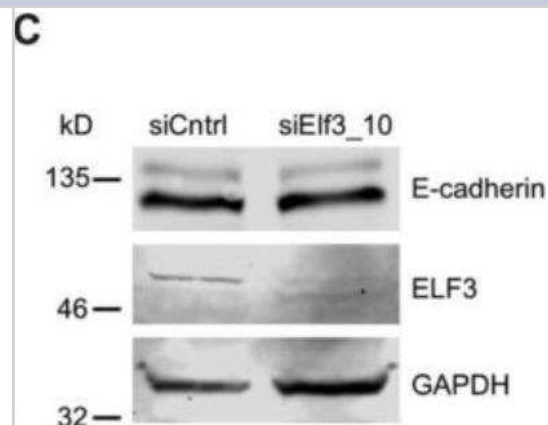
ELF3/ESE-1 Antibody - BSA Free

Product Information	
Unit Size	100 ul
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.01% Thimerosal
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	PBS, 20% Glycerol
Target Molecular Weight	41 kDa
Product Description	
Description	Novus Biologicals Rabbit ELF3/ESE-1 Antibody - BSA Free (NBP1-30873) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and ChIP. Anti-ELF3/ESE-1 Antibody: Cited in 3 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	1999
Gene Symbol	ELF3
Species	Human, Mouse, Rat
Reactivity Notes	Mouse reactivity reported in scientific publication (PMID: 31404945). Rat reactivity reported in scientific publication (PMID: 32439949).
Immunogen	Carrier-protein conjugated synthetic peptide encompassing a sequence within the C-terminus region of human ELF3/ESE-1. The exact sequence is proprietary.
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 1:500-1:3000, Immunohistochemistry 1:100-1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunohistochemistry-Paraffin 1:100-1:1000, Chromatin Immunoprecipitation (ChIP) Reported in (PMID: 32439949).

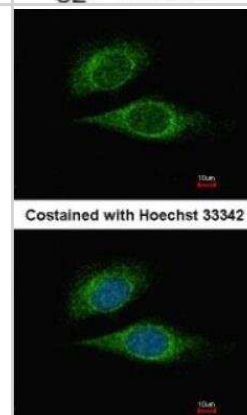


Images

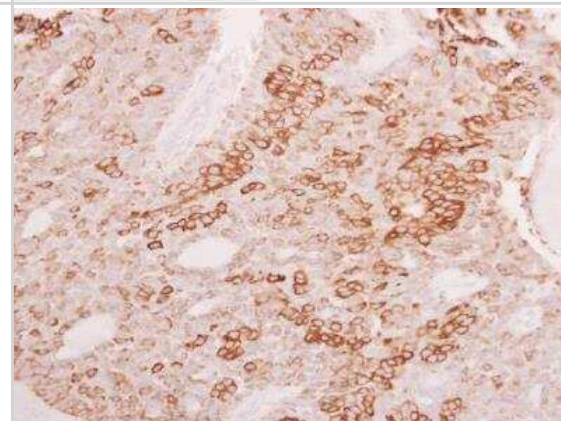
Western Blot: ELF3/ESE-1 Antibody [NBP1-30873] - Loss of Elf3 preserves the mesenchymal state. Immunoblot showing ELF3 and E-cadherin protein levels in response to Elf3 silencing by siRNAs. Image collected and cropped by CiteAb from the following publication (<https://www.mdpi.com/2073-4409/8/8/858>) licensed under a CC-BY license.



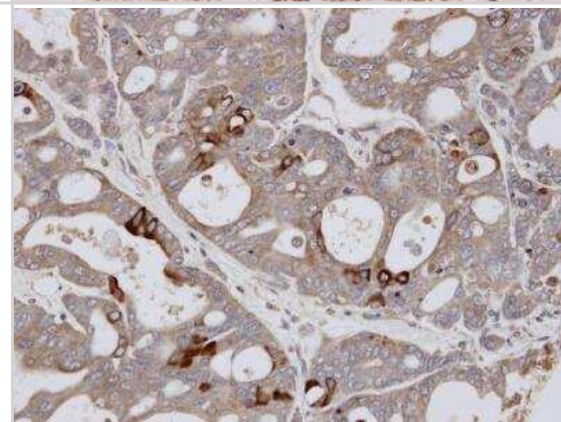
Immunocytochemistry/Immunofluorescence: ELF3/ESE-1 Antibody [NBP1-30873] - Methanol-fixed HeLa, using antibody at 1:500 dilution.



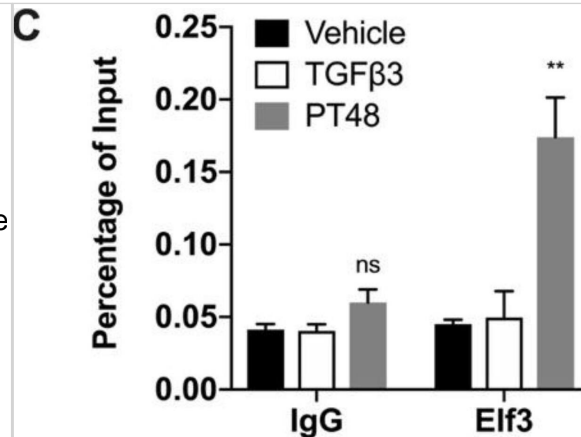
Immunohistochemistry-Paraffin: ELF3/ESE-1 Antibody [NBP1-30873] - Human lung carcinoma. ESE1 antibody [C2C3], C-term diluted at 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.



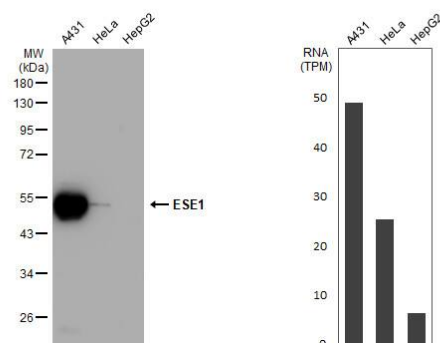
Immunohistochemistry-Paraffin: ELF3/ESE-1 Antibody [NBP1-30873] - NCI-N87 xenograft, using ESE1 antibody at 1:100 dilution. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.



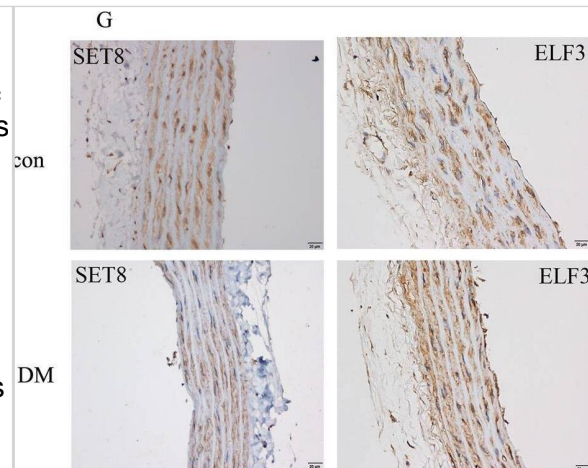
Chromatin Immunoprecipitation: ELF3/ESE-1 Antibody [NBP1-30873] - The transcription factor ELF3 regulates the Grhl3 promoter. (A) The sequence of the Grhl3 promoter (1000 bp) showing the location of the predicted TATA box, SP1 sequence, & the transcription start site. Sequences in red represent the conserved regions, & green bases represent putative ELF3 binding sites. (B) Luciferase reporter assay showing the activation of the Grhl3 promoter by ELF3. Relative luciferase activity is calculated as fold induction relative to vector. Drawings on the left side show a schematic representation of the Grhl3 promoter region (top) & the structure of each reporter plasmid (below). The conserved regions are shown as horizontal boxes labeled 1,2 & 3, the restriction enzymes used to generate the reporter deletions of the promoter are labeled. (C) ELF3 binding at the promoter of Grhl3. NMuMG cells were treated with either vehicle or TGFβ3 for 72 h, TGFβ3 treated cells were then washed with PBS & continued incubation for an additional 48 h to initiate MET (post-treatment: PT48). Cells were cross-linked, & chromatin immunoprecipitation was performed. ChIP DNA was used in qPCR to measure the occupancy of ELF3 compared to control antibodies. (D) Sequence alignment of one putative ELF3 binding site in the Grhl3 promoter showing conservation among different species. In B & C, data represent the averages of at least three independent experiments. The paired Student's t-test was used to calculate statistical significance. ** p-value < 0.01; **** p-value < 0.0001. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31404945>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: ELF3/ESE-1 Antibody [NBP1-30873] - Various whole cell extracts (30 ug) were separated by 10% SDS-PAGE, and the membrane was blotted with ESE1 antibody [C2C3], C-term diluted at 1:1000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody. Corresponding RNA expression data for the same cell lines are based on Human Protein Atlas program.



SET8 decrease and ELF3 increase were confirmed in diabetic patients and rats. a The mRNA expression of SET8 was examined by qPCR in PBMCs from diabetic patients and healthy controls (con: n = 30, DM: n = 50). b The mRNA expression of ELF3 was examined by qPCR in PBMCs from diabetic patients and healthy controls (con: n = 30, DM: n = 50). c Results from western blot analysis of ELF3 and SET8 expression in PBMCs from diabetic patients and healthy controls (con: n = 30, DM: n = 50). d The mRNA expression of SET8 was examined by qPCR in aorta tissues from the control group and diabetic group in rats (n = 5/group). e The mRNA expression of ELF3 was examined by qPCR in aorta tissues from the control group and diabetic group in rats (n = 5/group). f Results from western blot analysis of ELF3 and SET8 expression in aorta tissues from the control group and diabetic group in rats (n = 5/group). g Immunostaining of SET8 and ELF3 in aorta tissues from the control group and diabetic group (n = 5/group). Scale bar, 50 μ m. h Schematic representation of the working model. High glucose mediated NLRP3 inflammasome activation via upregulation of MARK4 expression in vascular endothelial cells. Moreover, high glucose increased ELF3 expression while inhibiting SET8 expression. Furthermore, ELF3 interacted with SET8 to modulate MARK4 expression, which was involved in the high glucose-mediated endothelial inflammasome activation in hyperglycaemic HUVECs. (*P \leq 0.001, **P \leq 0.0001, compared with the control group). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/32439949>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Man KF, Zhou L, Yu H et al. SPINK1-induced tumor plasticity provides a therapeutic window for chemotherapy in hepatocellular carcinoma *Nature communications* 2023-11-29 [PMID: 38030644]

Wang J, Shen X, Liu J et al. High glucose mediates NLRP3 inflammasome activation via upregulation of ELF3 expression *Cell Death Dis* 2020-05-21 [PMID: 32439949] (Chemotaxis, IHC-P, Rat)

Sengez B, Aygun I, Shehwana H et al. The Transcription Factor Elf3 Is Essential for a Successful Mesenchymal to Epithelial Transition Cells 2019-08-09 [PMID: 31404945] (Chemotaxis, Mouse)



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

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