

# Product Datasheet

## ZEB2 Antibody - BSA Free NBP1-77179

Unit Size: 0.1 mg

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

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



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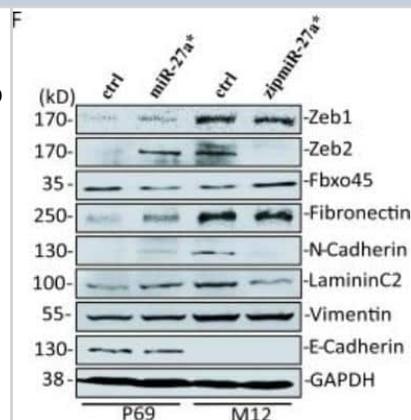
**NBP1-77179**

ZEB2 Antibody - BSA Free

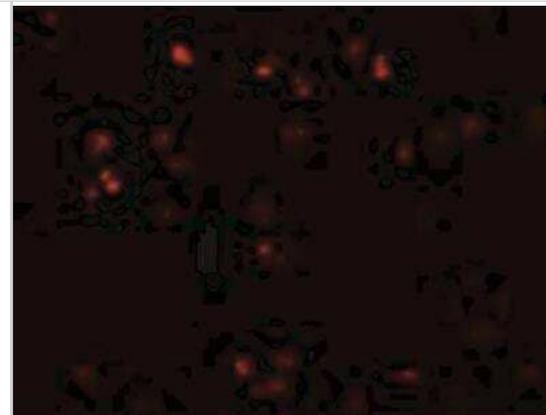
Product Information	
Unit Size	0.1 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Peptide affinity purified
Buffer	PBS
Target Molecular Weight	135 kDa
Product Description	
Host	Rabbit
Gene ID	9839
Gene Symbol	ZEB2
Species	Human, Mouse, Rat
Specificity/Sensitivity	ZEB2 antibody is predicted to not cross-react with ZEB1.
Immunogen	Antibody was raised against an 18 amino acid synthetic peptide near the carboxy terminus of human ZEB2. The immunogen is located within the last 50 amino acids of ZEB2. Amino Acid Sequence: DDSSEDGKMETKSDHEED
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1-2 ug/ml, ELISA 1:100-1:2000, Immunocytochemistry/ Immunofluorescence 20 ug/ml

**Images**

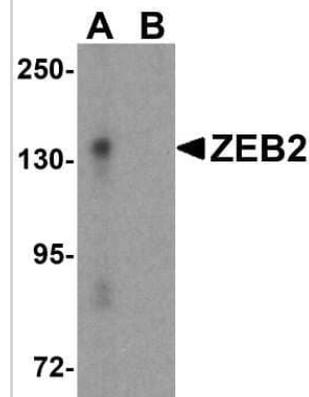
Western Blot: ZEB2 Antibody [NBP1-77179] - Immunoblot for detection of protein stability of core EMT-TFs under the treatment with 20uM of MG132 for 4 h before harvested. Image collected and cropped by CiteAb from the following publication ([oncotarget.com/fulltext/2825](http://oncotarget.com/fulltext/2825)), licensed under a CC-BY license.



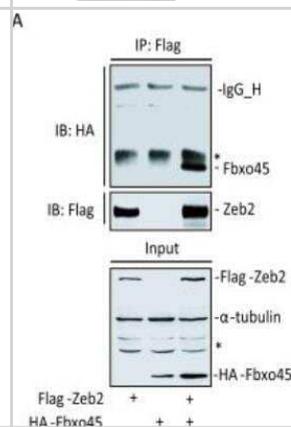
Immunocytochemistry/Immunofluorescence: ZEB2 Antibody [NBP1-77179] - Jurkat cells at 20 ug/mL.



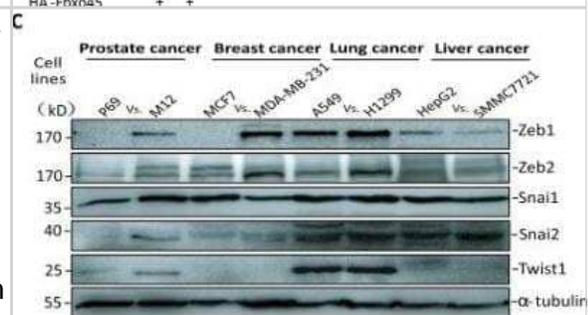
Western Blot: ZEB2 Antibody [NBP1-77179] - Analysis in EL4 cell lysate with antibody at 1 ug/mL in (A) the absence and (B) the presence of blocking peptide.



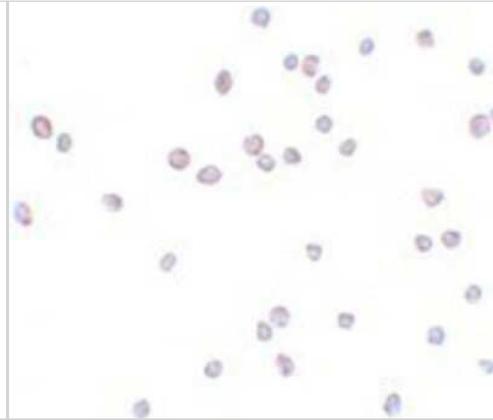
Western Blot: ZEB2 Antibody [NBP1-77179] - Lysates from 293T cells transfected Flag-Zeb2 with or without HA-Fbxo45 were immunoprecipitated (IP) with anti-Flag M2 antibody, and then immunoblotted. Total lysates were also used as Input for immunoblotting analysis. Image collected and cropped by CiteAb from the following publication ([oncotarget.com/fulltext/2825](http://oncotarget.com/fulltext/2825)), licensed under a CC-BY license.



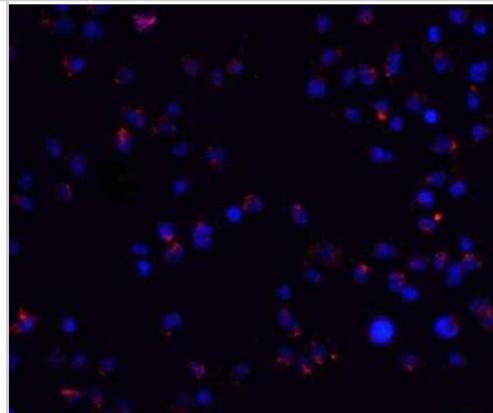
Western Blot: ZEB2 Antibody [NBP1-77179] - The protein levels of EMT-TFs were compared between carcinoma cell lines and non- or less-malignant tumor cell lines by using Western-blot analysis. The soft agar colony transformation or migration assay was referred to distinguish malignant degree of the experimental cancer cell lines (data not shown). Malignant degree: prostate cancer cell lines, P69 < M12; breast cancer cell lines, MCF7 < MD-MBA-231; lung cancer cell lines, A549 < H1299; liver cancer cell lines, HepG2 < SMMC7721. 'kD' (kilo-dalton) means the molecular weight of protein. Image collected and cropped by CiteAb from the following publication ([oncotarget.com/fulltext/2825](http://oncotarget.com/fulltext/2825)), licensed under a CC-BY license.



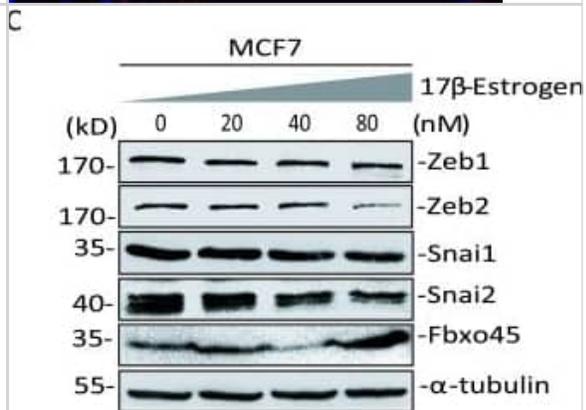
Immunocytochemistry/Immunofluorescence: ZEB2 Antibody [NBP1-77179] - Jurkat cells with ZEB2 antibody at 20 ug/mL.



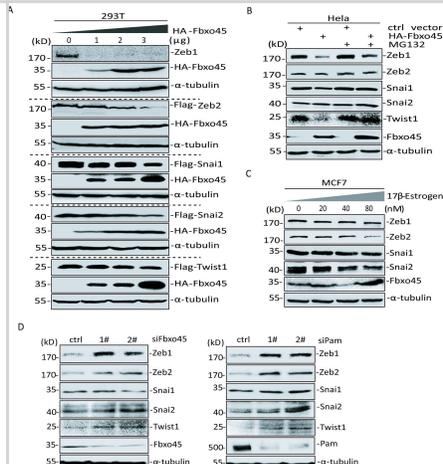
Immunocytochemistry/Immunofluorescence: ZEB2 Antibody [NBP1-77179] - Analysis of ZEB2 in Jurkat cells with ZEB2 antibody at 20 ug/ml.



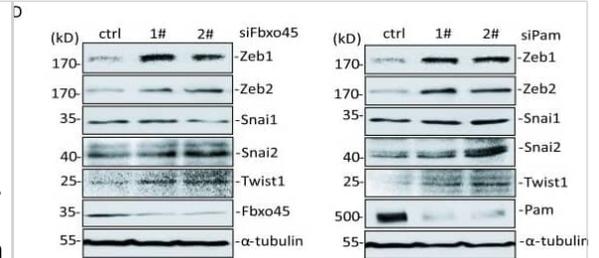
Western Blot: ZEB2 Antibody - BSA Free [NBP1-77179] - Fbxo45 induces degradation of core EMT-TFsA. Immunoblot for core EMT-TFs in 293T cells transfected Zeb1, Zeb2, Snai1, Snai2 or Twist1 with increasing amount of Fbxo45. B. Immunoblot for detecting endogenous core EMT-TFs in HeLa cells transfected with or without myc-tagged Fbxo45, & harvested after treatment with 20μM of MG132 for 4 hours. C. Immunoblot for endogenous Zeb1, Zeb2, Snai1 & Snai2 in MCF7 cells treated with indicated different concentrations of 17β-estrogen for 24 h in the phenol-free medium to induce the expression of endogenous Fbxo45. D. Immunoblot for endogenous core EMT-TFs in HeLa transfected with siRNAs for Fbxo45 or Pam. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/25460509>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



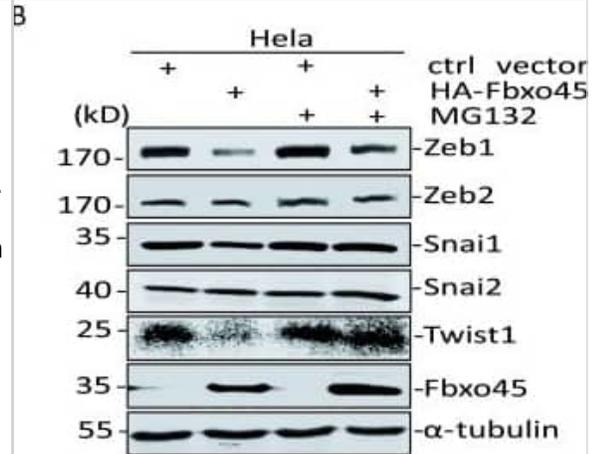
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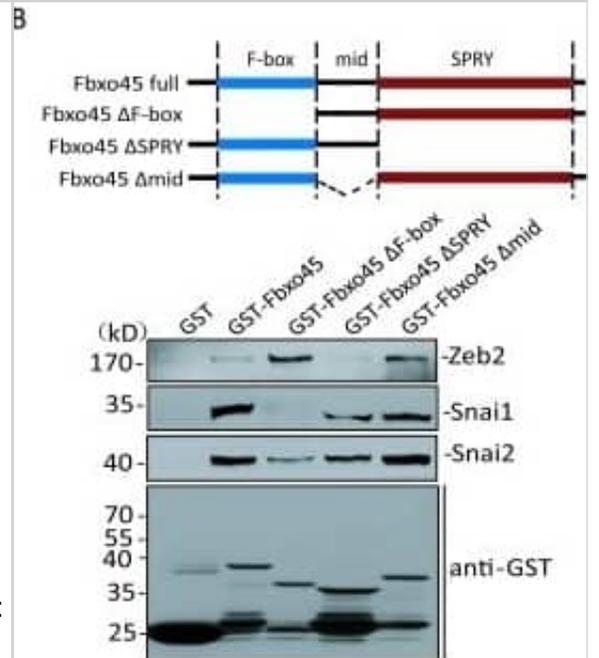
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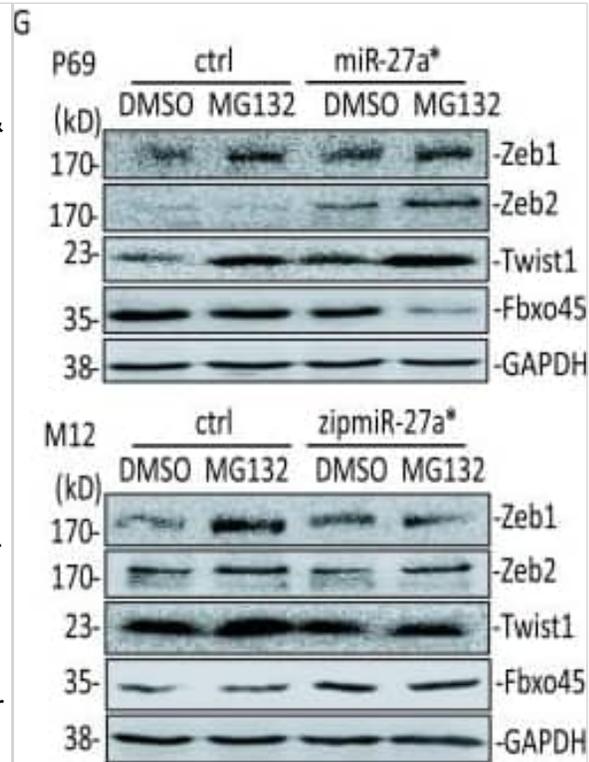
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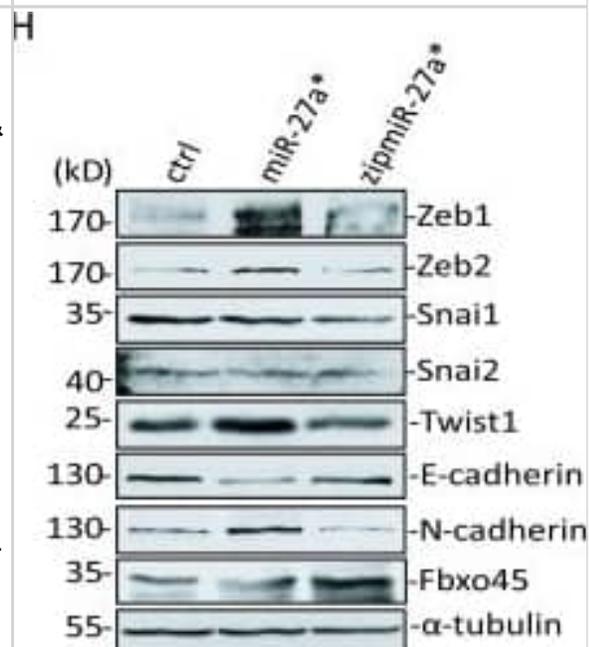
Western Blot: ZEB2 Antibody - BSA Free [NBP1-77179] - Functional domains of Fbxo45 for ubiquitination of Zeb2A. Lysates from 293T cells transfected Flag-Zeb2 with or without HA-Fbxo45 were immunoprecipitated (IP) with anti-Flag M2 antibody, & then immunoblotted. Total lysates were also used as Input for immunoblotting analysis. B. Bacterially expressed GST or GST-Fbxo45, -Fbxo45 $\Delta$ F-box, -Fbxo45 $\Delta$ mid, or -Fbxo45 $\Delta$ SPRY fusion proteins & Glutathione-Sepharose beads were incubated with lysates of HeLa cells transfected with Zeb2, Snai1 or Snai2, respectively. The proteins associated with GST-tagged Fbxo45 forms, bound on the Glutathione-Sepharose beads were washed five times with the RIPA buffer before immunoblotting. C. Lysates from 293T cells transfected Flag-Zeb2 with HA-Fbxo45, -Fbxo45 $\Delta$ mid, -Fbxo45 $\Delta$ F-box or -Fbxo45 $\Delta$ SPRY were immunoprecipitated with anti-Flag or anti-HA antibodies, & immunoprecipitates were resolved by SDS-PAGE for Western-blot analysis. D. U2OS cells transfected with Flag-Zeb2 & HA-Fbxo45, -Fbxo45 $\Delta$ F-box or -Fbxo45 $\Delta$ SPRY were stained using the primary antibodies of anti-Flag M2 or anti-HA, & the second antibodies of Alexa Fluor 568 anti-mouse or Alexa Fluor 488 anti-Rabbit, respectively. Scale: 25 $\mu$ m. E-I. Zeb2 ubiquitination assays by using IP experiments under different conditions: Flag-Zeb2 with or without HA-Ub (E); Flag-Zeb2 with HA-Ub WT, K48R or K63R (F); Flag-Zeb2 & HA-Ub K48-only with or without myc-Fbxo45 (G); Flag-Zeb2 & HA-Ub K48-only with siRNA control, siRNAs for Fbxo45 or siRNAs for Pam (H); Flag-Zeb2 & HA-Ub with HA-Fbxo45, -Fbxo45 $\Delta$ F-box or -Fbxo45 $\Delta$ SPRY (I). Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/25460509>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: ZEB2 Antibody - BSA Free [NBP1-77179] - Fbxo45 is a direct target of miR-27a\* that mediates EMT processes. A, C. The expression levels of miR-27a\* (A) & Fbxo45 mRNA (C) in P69 & M12 were shown according to the data of miRNA transcriptome sequencing & DGE sequencing, respectively [46]. TPM means transcripts per million. B. Real-time PCR in  $\Delta\Delta C_t$  methods were used to confirm the expression levels of miR-27a\* in P69 & M12. One representative experiment out of three was shown. D. Fbxo45 mRNA levels in stable cell lines miR-27a\*-overexpressing P69 & miR-27a\*-silencing M12 (zipmiR-27a\*). P69 or M12 stably infected with the same lentiviral empty vector was used as a control (ctrl). E. Fbxo45 3'-UTR wide-type or mutant form at the position where is complementary to the 5' seed region of miR-27a\* was subcloned into psiCheck2 vector. 293T cells were transfected with psiCheck2 containing WT or mutant Fbxo45 3'-UTR & miR-27a\* or non-specific control vector. The Renilla luciferase activity was normalized on the constitutive activity of firefly luciferase. Data are the mean  $\pm$  S.E.M. of three independent experiments. F-G. Immunoblot for Fbxo45, core EMT-TFs (Zeb1, Zeb2, Twist1) & their associated EMT markers (Fibronectin, N-cadherin, Laminin C2, Vimentin & E-cadherin) in stable cell lines P69-miR-27a\* or M12-zipmiR-27a\* (F); Immunoblot for detection of protein stability of core EMT-TFs under the treatment with 20  $\mu$ M of MG132 for 4 h before harvested (G). GAPDH is for a loading control. H. Immunoblot for Fbxo45, N-cadherin, E-cadherin & five core EMT-TFs in stable cell lines PC3-ctrl, PC3-miR-27a\* & PC3-zipmiR-27a\*.  $\alpha$ -tubulin is for a loading control. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/25460509>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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## Publications

Xu M, Zhu C, Zhao X et al. Atypical ubiquitin E3 ligase complex Skp1-Pam-Fbxo45 controls the core epithelial-to-mesenchymal transition-inducing transcription factors. *Oncotarget* 2015-01-20 [PMID: 25460509]





### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP1-82991PEP	ZEB2 Recombinant Protein Antigen

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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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