

# Product Datasheet

## Cre Antibody - BSA Free NB100-56133

Unit Size: 0.05 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)

**Reviews: 1 Publications: 13**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NB100-56133](http://www.novusbio.com/NB100-56133)

Updated 2/13/2024 v.20.1

Earn rewards for product  
reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NB100-56133](http://www.novusbio.com/reviews/destination/NB100-56133)



**NB100-56133**

Cre Antibody - BSA Free

**Product Information**

<b>Unit Size</b>	0.05 ml
<b>Concentration</b>	1 mg/ml
<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>	0.1% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS

**Product Description**

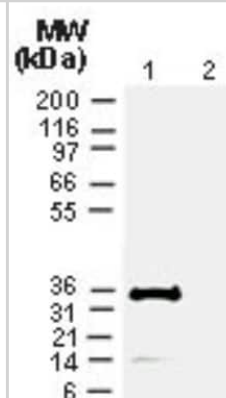
<b>Host</b>	Rabbit
<b>Species</b>	Mouse, Cre/lox System
<b>Reactivity Notes</b>	Specific to Cre/lox system (Bacteriophage). Shown to detect Cre protein in Cre-transfected human cells (HeLa) and Cre-transgenic mice. Mouse reactivity reported in scientific literature (PMID: 28194015).
<b>Immunogen</b>	A synthetic peptide made to a portion of bacteriophage protein CRE (within amino acids 50-100). [UniProt# P06956]

**Product Application Details**

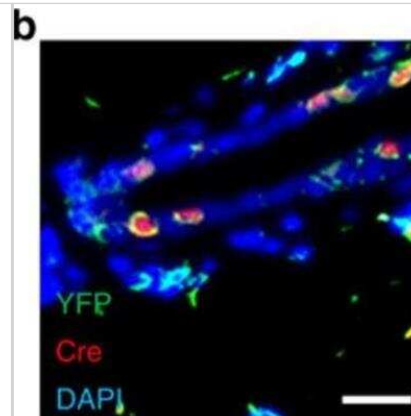
<b>Applications</b>	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation
<b>Recommended Dilutions</b>	Western Blot 1:1000 - 1:4000, Immunohistochemistry 1:500, Immunocytochemistry/ Immunofluorescence 1:10 - 1:500, Immunoprecipitation 1:50 - 1:200, Immunohistochemistry-Paraffin 1:1000 - 1:5000, Immunohistochemistry-Frozen 1:1000 - 1:5000

**Images**

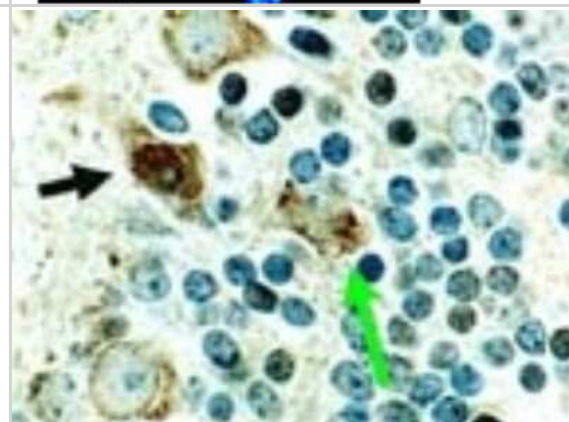
Western Blot: Cre Antibody [NB100-56133] - Analysis of Cre using NB100-56133 at 1:2000. Lane 1: HeLa cells stably transfected with a CRE expression plasmid. Lane 2: HeLa cells transfected with a neo plasmid (negative control).



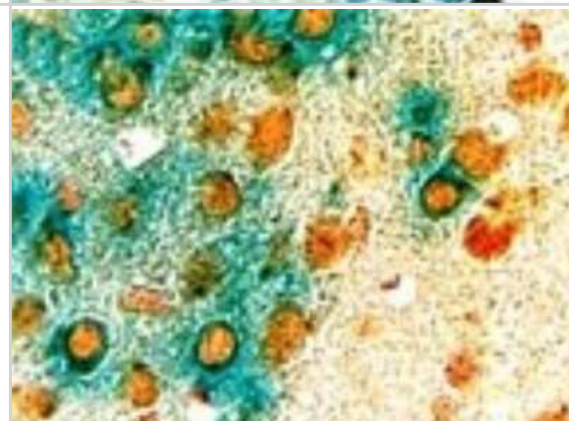
Immunohistochemistry: Cre Antibody - BSA Free [NB100-56133] - Representative co-IF image showing YFP (green) and Cre (red) staining on a MG section from a Trp53L/L;R26Y female 3 days after Ad-K8-Cre injection. Trp53L/L;R26Y females (n=3); R26Y females (n=3). Scale bar, 20  $\mu$ m. Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/28194015/>) licensed under a CC-BY license.



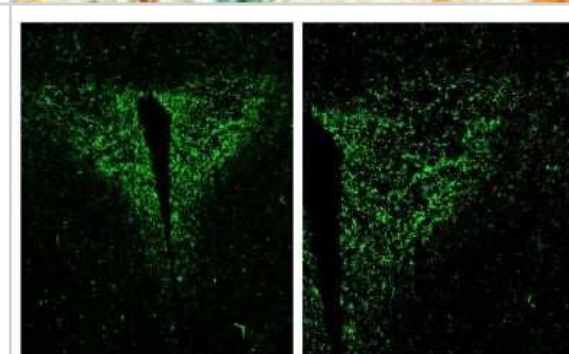
Immunohistochemistry: Cre Antibody [NB100-56133] - FFPE tissue section from the cerebellum of a Cre transgenic mouse using NB100-56133 at 1:2000. In this mouse line, Cre is expressed in the brain, predominantly in the nuclei of most types of neurons. The arrow denotes an example of a stained neuron. Cre staining is also seen in the cytosol of cerebellar Purkinje cells. Hematoxylin-eosin counterstain.



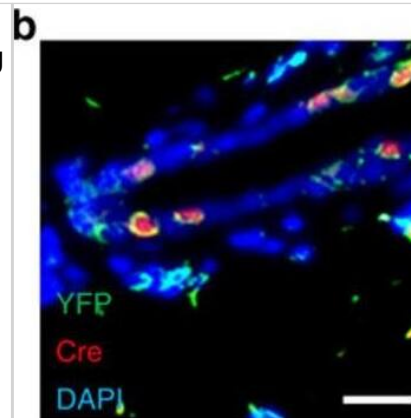
Immunohistochemistry: Cre Antibody [NB100-56133] - FFPE tissue section from the cerebellum of a Cre transgenic mouse using NB100-56133 at 1:2000. In this mouse line, Cre is expressed in the neurons brain. This mouse line also contains a LacZ reporter gene that becomes transcriptionally active upon Cre-mediated recombination. Brain tissue slices were stained with X-gal (blue color) prior to embedding. Cre staining is brown. Nuclear Red counterstain.



Immunohistochemistry: Cre Antibody [NB100-56133] - Enkephalin expression in the Paraventricular nucleus of the hypothalamus (PVN) in mouse brain. Antibody at 1:500. Image from verified customer review.



Induced loss of p53 in luminal cells leads to their clonal expansion. (b) Representative co-IF picture showing YFP (green) and Cre (red) staining on a MG section from a Trp53L/L;R26Y female 3 days after Ad-K8-Cre injection. Trp53L/L;R26Y females (n=3); R26Y females (n=3). Scale bar, 20  $\mu$ m. Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/ncomms14431>), licensed under a CC-BY licence.



## Publications

Tandel J, English ED, Sateriale A et al. Life cycle progression and sexual development of the apicomplexan parasite *Cryptosporidium parvum* Nature Microbiology 2019-09-02 [PMID: 31477896] (FLOW)

Huang P, Narendran S, Pereira F et al. Subretinal injection in mice to study retinal physiology and disease Nature protocols [PMID: 35418688]

El-Hindi K, Brachtendorf S, Hartel JC et al. Ceramide Synthase 5 Deficiency Aggravates Dextran Sodium Sulfate-Induced Colitis and Colon Carcinogenesis and Impairs T-Cell Activation Cancers (Basel) 2020-07-01 [PMID: 32630271] (IF/IHC, Mouse)

Jeong JK, Horwath JA, Simonyan H, et al Subfornical organ insulin receptors tonically modulate cardiovascular and metabolic function Physiol. Genomics 2019-06-07 [PMID: 31172876] (IF/IHC, Mouse)

Lecoeur H, Prina E, Rosazza T et al. Loss of PGC-1 alpha in RPE induces mesenchymal transition and promotes retinal degeneration Life Sci Alliance 2019-06-01 [PMID: 31101737] (IHC-Fr)

Rosales MAB, Shu DY, Iacovelli J, Saint-Geniez M Capicua regulates neural stem cell proliferation and lineage specification through control of Ets factors Nat Commun 2019-05-01 [PMID: 31043608] (ICC/IF, WB, Mouse)

Kenerson Heidi L, Yeh Matthew M, Kazami Machiko et al. Akt and mTORC1 have different roles during liver tumorigenesis in mice. Gastroenterology 2013-01-01 [PMID: 23376645] (WB, Mouse)

Zhao GF, Zhao S, Liu JJ et al. Cytokeratin 19 promoter directs the expression of Cre recombinase in various epithelia of transgenic mice. Oncotarget. 2017-03-14 [PMID: 28407687] (WB, Mouse)

Tao L, Xiang D, Xie Y et al. Induced p53 loss in mouse luminal cells causes clonal expansion and development of mammary tumours. Nat Commun. 2017-02-13 [PMID: 28194015]

Gonzalez-Sanchez E, Martin-Caballero J, Flores JM et al. Lkb1 Loss Promotes Tumor Progression of BRAFV600E-Induced Lung Adenomas. PLoS One 2013-06-25 [PMID: 23825589] (IHC-P, Mouse)

Welsbie DS, Yang Z, Ge Y et al. Functional genomic screening identifies dual leucine zipper kinase as a key mediator of retinal ganglion cell death. Proc Natl Acad Sci U S A 2013-03-05 [PMID: 23431148] (IF/IHC, ICC/IF, Mouse)

Banares S, Zeh K, Krajewska M et al. Novel pan-neuronal Cre-transgenic line for conditional ablation of genes in the nervous system. Genesis. 2005-05-01 [PMID: 15828007] (WB, IF/IHC, Mouse)

Details:

1. IMG-5720 (AR-59A): WB., IHC-P. 2. IMG-5721 (AR-59B): WB, IHC-F. 3. IMG-5722 (AR-60A): IHC-P

More publications at <http://www.novusbio.com/NB100-56133>

## Procedures

### Western Blot protocol for Cre Antibody (NB100-56133)

#### Western Blot Protocol

1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 35 ug of total protein per lane.
  2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
  3. Rinse membrane with dH<sub>2</sub>O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
  4. Rinse the blot in TBS for approximately 5 minutes.
  5. Block the membrane using 5% NFD<sub>M</sub> + 1% BSA in TBS + Tween, 1 hour at RT.
  6. Rinse the membrane in dH<sub>2</sub>O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
  7. Dilute the rabbit anti-cre primary antibody (NB100-56133) in blocking buffer and incubate 1 hour at room temperature.
  8. Rinse the membrane in dH<sub>2</sub>O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
  9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
  10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
  11. Apply the detection reagent of choice in accordance with the manufacturers instructions (Pierce ECL).
- Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.





### **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

### **Products Related to NB100-56133**

---

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NB100-56133F	Cre Antibody [FITC]

---

### **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.

For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NB100-56133](http://www.novusbio.com/reviews/submit/NB100-56133)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

