

# Product Datasheet

## COPS6 Antibody (OTI4E7)

### NBP2-46333

Unit Size: 0.1 ml

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

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



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

#### Publications: 1

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-46333](http://www.novusbio.com/NBP2-46333)

Updated 9/9/2025 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/NBP2-46333](http://www.novusbio.com/reviews/destination/NBP2-46333)



**NBP2-46333**

COPS6 Antibody (OTI4E7)

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	OTI4E7
Preservative	0.02% Sodium Azide
Isotype	IgG2a
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.3), 1.0% BSA and 50% Glycerol
Target Molecular Weight	36 kDa

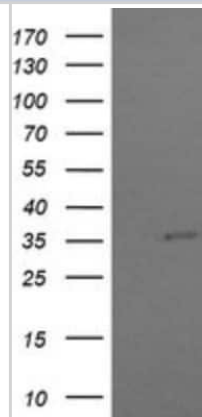
Product Description	
Description	Novus Biologicals Mouse COPS6 Antibody (OTI4E7) (NBP2-46333) is a monoclonal antibody validated for use in IHC, WB and ICC/IF. Anti-COPS6 Antibody: Cited in 1 publication. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	10980
Gene Symbol	COPS6
Species	Human, Mouse, Rat
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Immunogen	Human recombinant protein fragment corresponding to amino acids 58-327 of human COPS6(NP_006824) produced in E.coli.

Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:2000, Immunohistochemistry 1:150, Immunocytochemistry/Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:150

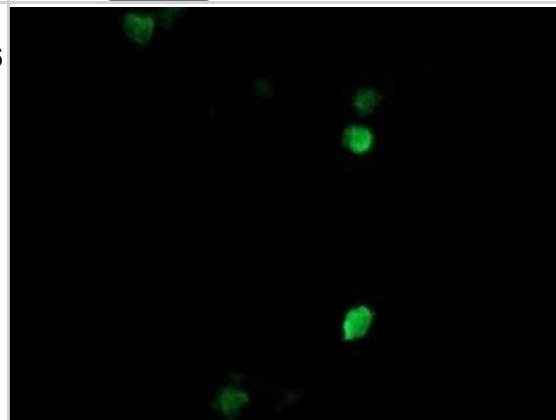


## Images

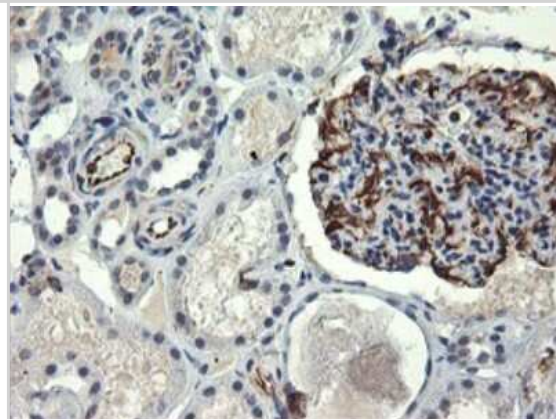
Western Blot: COPS6 Antibody (OT14E7) [NBP2-46333] - Analysis of HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY COPS6.



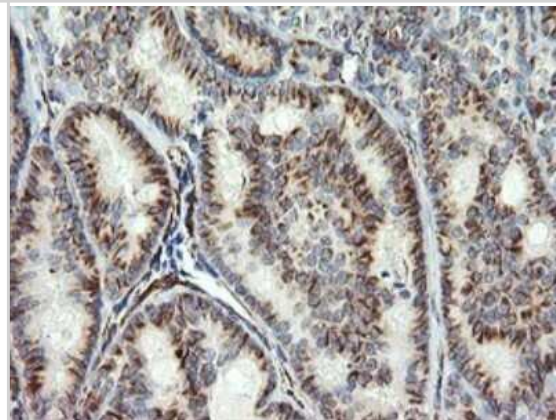
Immunocytochemistry/Immunofluorescence: COPS6 Antibody (OT14E7) [NBP2-46333] - Analysis of COS7 cells transiently transfected by pCMV6-ENTRY COPS6.



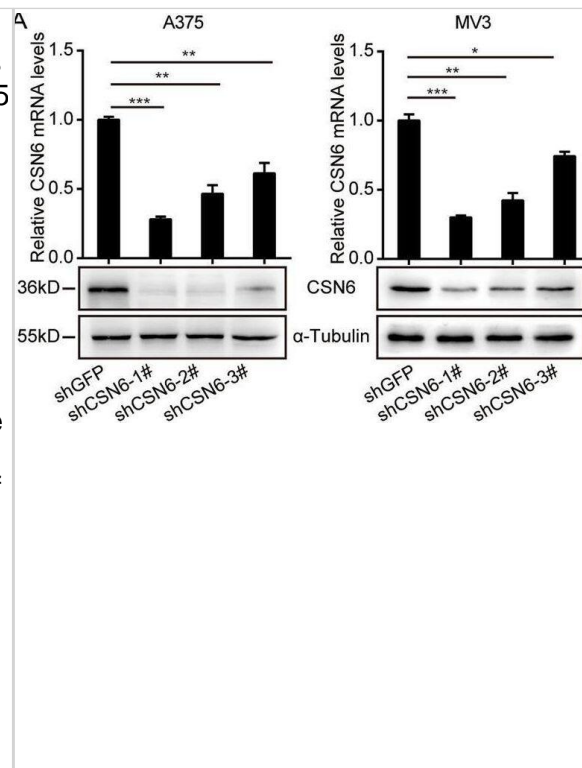
Immunohistochemistry: COPS6 Antibody (OT14E7) [NBP2-46333] - Analysis of Human Kidney tissue. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120C for 3min)



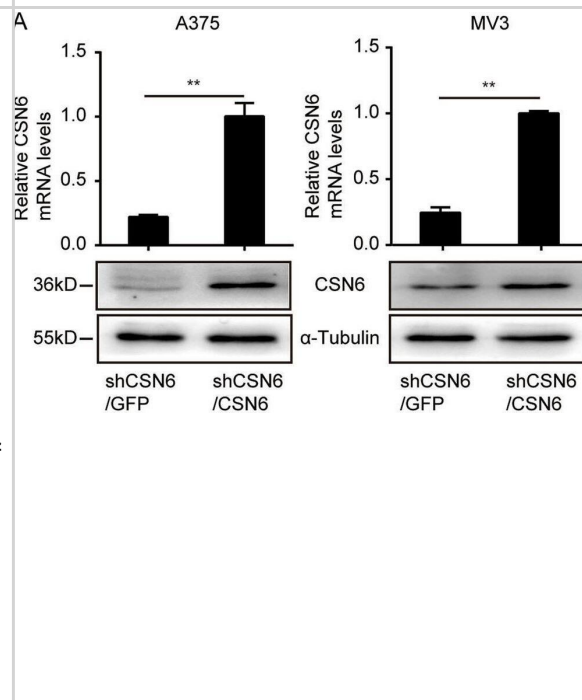
Immunohistochemistry: COPS6 Antibody (OT14E7) [NBP2-46333] - Analysis of Carcinoma of Human thyroid tissue. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120C for 3min)



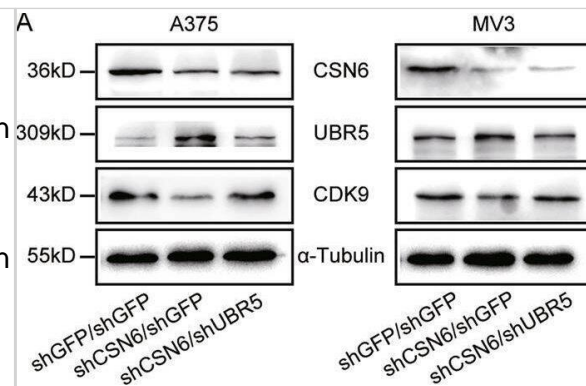
CSN6 is required for the proliferation, migration and invasion of melanoma cells and regulates cell cycle progression. A qRT-PCR assays and western blot analysis of CSN6 expression in CSN6-knockdown A375 and MV3 melanoma cells. B Growth curves of A375 and MV3 cells expressing shGFP, shCSN6#1, or shCSN6#2 (n = 4). C Representative fluorescence micrographs and quantification of BrdU staining to detect the amount of DNA synthesis in CSN6-knockdown A375 and MV3 melanoma cells. Scale bar = 100  $\mu$ m. D Flow cytometry assays performed to quantify the cell population in each phase of the cell cycle. A375 and MV3 cells expressing shGFP, shCSN6#1, or shCSN6#2 were evaluated. E, F Migration and invasion assays performed with A375 and MV3 cells expressing shGFP, shCSN6#1, or shCSN6#2 (left), and calculations of the migratory or invasive cells (right). Migratory cells were stained with crystal violet and counted at 12 h. Invasive cells were stained and counted at 24 h. Scale bar = 50  $\mu$ m. G Protein expression of several cell cycle regulatory proteins and metastasis-related proteins in A375 and MV3 cells expressing shGFP, shCSN6#1, or shCSN6#2. All data are shown as the mean  $\pm$  SD, and data were analyzed using two-tailed Student's t-tests; \*P < 0.05, \*\*P < 0.01, and \*\*\*P < 0.001. All P-values are based on control versus treatment comparisons. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/33483464>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



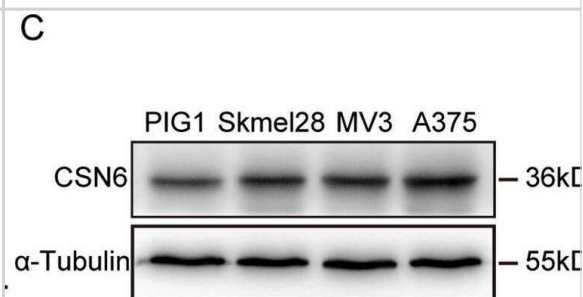
CSN6 recovery rescues the cell proliferation, migration, and invasion of CSN6-silenced melanoma cells. A qRT-PCR and western blot assays were used to confirm CSN6 expression in CSN6-rescued CSN6-knockdown A375 and MV3 melanoma cells. B CSN6 recovery rescued the proliferation of A375 and MV3 melanoma cells. Growth curves are shown for the CSN6-rescued CSN6-knockdown cells (n = 4). C Representative fluorescence micrographs and quantification of BrdU staining in CSN6-rescued CSN6-knockdown A375 and MV3 cells are shown. Scale bar = 100  $\mu$ m. D, E Migration and invasion assays were performed with CSN6-rescued CSN6-knockdown A375 and MV3 cells (left), and the quantification of migratory or invasive cells (right). Migratory cells were stained with crystal violet and counted at 12 h. Invasive cells were stained and counted at 24 h. Scale bar = 50  $\mu$ m. F Western blot assays were used to detect the protein expression levels of cell cycle regulatory proteins and metastasis-related proteins in CSN6-rescued CSN6-knockdown A375 and MV3 melanoma cells. All data are shown as the mean  $\pm$  SD, \*P < 0.05 and \*\*P < 0.01. All P-values are based on control versus treatment comparisons. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/33483464>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



The effects induced by CSN6 silencing were abrogated by downregulation of UBR5 expression in CSN6-knockdown cells. A Total cellular extracts from CSN6-knockdown and UBR5-knockdown CSN6-knockdown A375 and MV3 cells were prepared and subjected to western blotting with the indicated antibody. B The migration and invasion of CSN6-knockdown and UBR5-knockdown CSN6-knockdown A375 and MV3 cells were quantified. C The growth curves of CSN6-knockdown and UBR5-knockdown CSN6-knockdown A375 and MV3 cells are shown (n = 4). D An in vitro colony formation assay was performed with CSN6-knockdown and UBR5-knockdown CSN6-knockdown A375 and MV3 cells. E, F Stably transfected CSN6-knockdown or UBR5-knockdown CSN6-knockdown A375 cells ( $1 \times 10^6$  cells) or control cells were subcutaneously injected into right dorsal side of female nude mice (n = 6). Tumor volume was measured when the tumors reached a certain volume. Two weeks after injection, the mice were sacrificed, and the tumors were collected and weighed. One-way ANOVA. G Immunohistochemical analysis was conducted to detect CSN6, UBR5, CDK9 and Ki-67 expression, Scale bar = 100  $\mu$ m. H The model of the CSN6-UBR5-CDK9 axis is shown. All data are shown as the mean  $\pm$  SD, \*P < 0.05, \*\*P < 0.01, and \*\*\*P < 0.001. All P-values are based on control versus treatment comparisons. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/33483464>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



High CSN6 expression is associated with a poor melanoma patient prognosis. A Representative immunohistochemical staining assays showing CSN6 expression in human benign nevus tissue (left, n = 9) and melanoma tissue (right, n = 15). B Immunohistochemical analyses of CSN6 expression levels in 9 benign nevus tissue samples and 15 melanoma tissue samples, P < 0.001. C, D Western blot and qRT-PCR assays performed to detect CSN6 expression in the A375, MV3, and Skmel28 melanoma cell lines and the immortalized melanocyte cell line PIG1. E, F Kaplan–Meier analysis of the overall survival probability using data from the online R2 database. P-values calculated by the log-rank test are indicated. G Box plot analysis of CSN6 expression levels with the pathological stage of melanoma. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/33483464>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Zhang Y, Hou J, Shi S, et al. CSN6 promotes melanoma proliferation and metastasis by controlling the UBR5-mediated ubiquitination and degradation of CDK9 Cell death & disease 2021-01-22 [PMID: 33483464]



### **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 NBP2-46333**

---

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-96778	Mouse IgG2a Isotype Control (M2A)

---

### **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/NBP2-46333](http://www.novusbio.com/reviews/submit/NBP2-46333)

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

