

# Product Datasheet

## IDH2 Antibody - BSA Free NBP2-22166

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)

**Reviews: 2 Publications: 5**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-22166](http://www.novusbio.com/NBP2-22166)

Updated 10/23/2024 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/NBP2-22166](http://www.novusbio.com/reviews/destination/NBP2-22166)



**NBP2-22166**

IDH2 Antibody - BSA Free

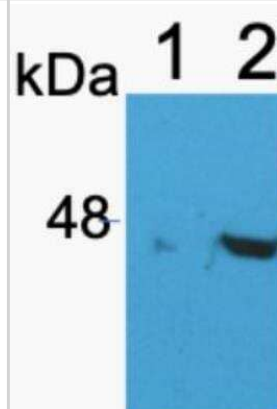
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description	
Host	Rabbit
Gene ID	3418
Gene Symbol	IDH2
Species	Human, Mouse, Rat
Immunogen	A synthetic peptide made to a C-terminal portion of the human IDH2 protein (between residues 375-452) [UniProt P48735].

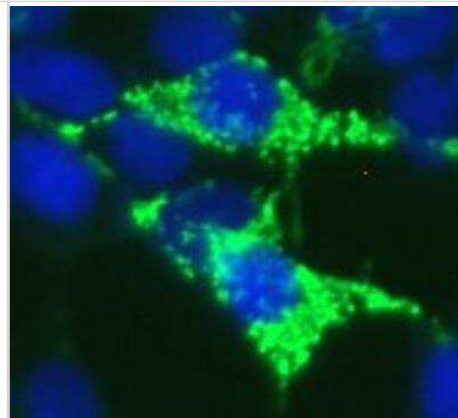
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1 - 2 ug/mL, Immunohistochemistry 1:100 - 1:500, Immunocytochemistry/ Immunofluorescence 1:250 - 1:500, Immunohistochemistry-Paraffin 1:100 - 1:500
Application Notes	In Western blot a band is observed ~48 kDa. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

**Images**

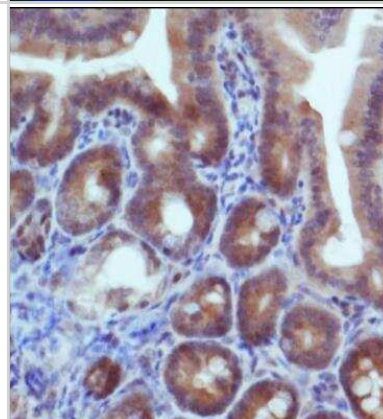
Western Blot: IDH2 Antibody [NBP2-22166] - 1) Non transfected 293T cells. 2) IDH2-flag (c-term) transfected 293T cells. WB image submitted by a verified customer review.



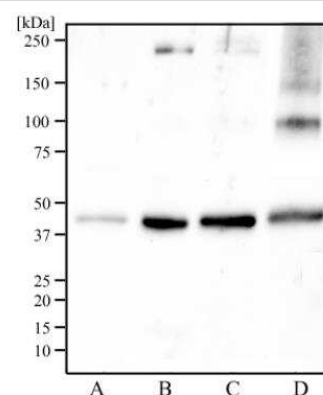
Immunocytochemistry/Immunofluorescence: IDH2 Antibody [NBP2-22166] - 293T cells transfected with IDH2-flag expression construct were fixed and stained with anti-IDH2 antibody followed by Alexa Fluor 488 anti-rabbit secondary antibody. DAPI staining shows nuclei. ICC/IF image submitted by a verified customer review.



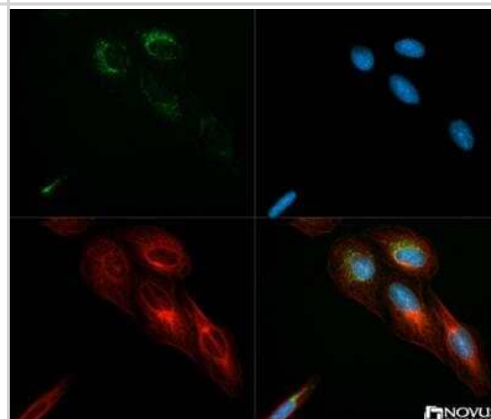
Immunohistochemistry: IDH2 Antibody [NBP2-22166] - Staining of IDH2 in mouse intestine.



Western Blot: IDH2 Antibody [NBP2-22166] - Analysis of Caki-1 cell lysate (A), human skeletal muscle tissue (B), mouse skeletal muscle tissue (C), and rat skeletal muscle tissue (D) using IDH2 antibody at a concentration of 2 ug/mL.



Immunocytochemistry/Immunofluorescence: IDH2 Antibody [NBP2-22166] - IDH2 antibody was tested in U2OS cells with DyLight (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).



## Publications

Lin S, Yin S, Shi J et al. Orchestration of energy metabolism and osteogenesis by Mg<sup>2+</sup> facilitates low-dose BMP-2-driven regeneration *Bioactive Materials* 2022-12-01 [PMID: 35387176] (IF/IHC, Mouse)

Oyama Y, Bartman CM, Bonney S et al. Intense Light-Mediated Circadian Cardioprotection via Transcriptional Reprogramming of the Endothelium *Cell Rep* 2019-08-08 [PMID: 31390562] (WB, Human)

Kim YR, Kim KH, Lee S et al. Expression patterns of members of the isocitrate dehydrogenase gene family in murine inner ear *Biotech Histochem* 2017-09-19 [PMID: 28925723] (Mouse)

Saha SK, Parachoniak CA, Ghanta KS et al. Mutant IDH inhibits HNF-4alpha to block hepatocyte differentiation and promote biliary cancer. *Nature* 2014-09-04 [PMID: 25043045] (WB)

Saha SK, Gordan JD, Kleinstiver BP et al. Isocitrate dehydrogenase mutations confer dasatinib hypersensitivity and SRC-dependence in intrahepatic cholangiocarcinoma. *Cancer Discov.* 2016-05-26 [PMID: 27231123] (WB, Human)



## Procedures

### Western Blot protocol for IDH2 Antibody (NBP2-22166)

IDH2 Antibody:

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 25 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute anti-IDH2 primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted 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 three 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.

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

### Immunohistochemistry-Paraffin protocol for IDH2 Antibody (NBP2-22166)

IDH2 Antibody:

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.



**Immunocytochemistry/Immunofluorescence protocol for IDH2 Antibody (NBP2-22166)**

IDH2 Antibody:

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

\*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





### **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 NBP2-22166**

---

NB820-59253	Human Skeletal Muscle Whole Tissue Lysate (Adult Whole Normal)
NBP2-22166PEP	IDH2 Antibody Blocking Peptide
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

---

### **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/NBP2-22166](http://www.novusbio.com/reviews/submit/NBP2-22166)

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

