Product Datasheet

Kif2a Antibody - Azide and BSA Free
NB500-180

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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Publications: 19

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
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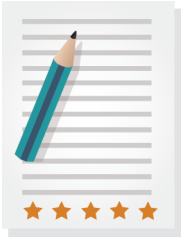
Updated 9/9/2025 v.20.1



NB500-180

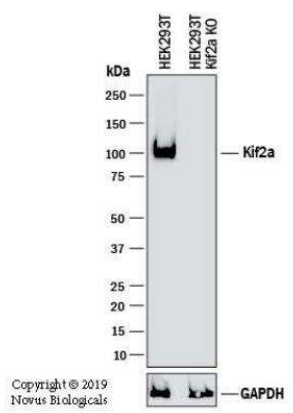
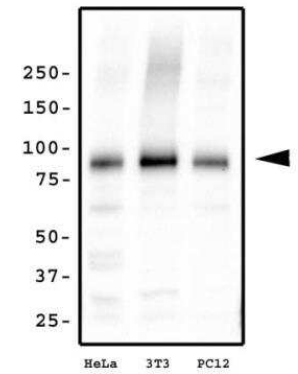
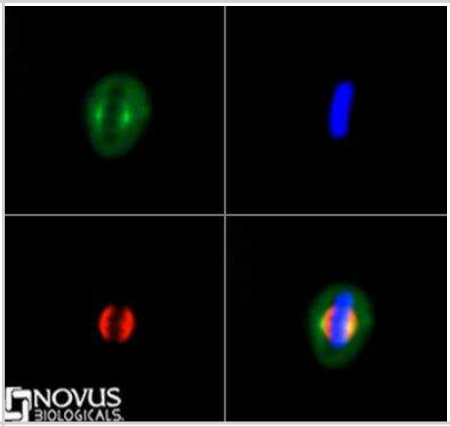
Kif2a Antibody - Azide and BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	No Preservative
Isotype	IgG
Purity	Unpurified
Buffer	Whole antisera
Target Molecular Weight	110 kDa

Product Description	
Description	Novus Biologicals Knockout (KO) Validated Rabbit Kif2a Antibody - Azide and BSA Free (NB500-180) is a polyclonal antibody validated for use in WB, ICC/IF, Simple Western and IP. Anti-Kif2a Antibody: Cited in 19 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	3796
Gene Symbol	KIF2A
Species	Human, Mouse, Rat, Porcine, Mammal
Immunogen	A recombinant segment of the N-terminal domain of human Kif2a. [UniProt# O00139]

Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Knockout Validated
Recommended Dilutions	Western Blot 1:1000, Simple Western 1:1000, Immunocytochemistry/ Immunofluorescence 1:50 - 1:500, Immunoprecipitation 1:10-1:500, Knockout Validated
Application Notes	This Kif2a antibody is useful for Western blot, Immunoprecipitation, and Immunocytochemistry/Immunofluorescence. A band at approx. 110 kDa can be detected by Western blot. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in HeLa lysate 0.5 mg/mL, separated by Size, antibody dilution of 1:1000, apparent MW was 98 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Images

Western Blot: Kif2a Antibody [NB500-180] - Western blot shows lysates of HEK293T human embryonic kidney parental cell line and Kif2a knockout (KO) HEK293T cell line. PVDF membrane was probed with 1:10000 of Rabbit Anti-Human Kif2a Polyclonal Antibody (Catalog # NB500-180) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog #HAF008). Specific band was detected for Kif2a at approximately 100 kDa (as indicated) in the parental HEK293T cell line, but is not detectable in the knockout HEK293T cell line. This experiment was conducted under reducing conditions.	
Western Blot: Kif2a Antibody [NB500-180] - Analysis of Kif2a in Hela, 3T3 and PC12 lysate.	
Immunocytochemistry/Immunofluorescence: Kif2a Antibody [NB500-180] - Kif2a antibody was tested in HeLa cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).	
Simple Western: Kif2a Antibody [NB500-180] - Lane view shows a specific band for Kif2a in 0.5 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	

Publications

Anja Bufe, Ana García Del Arco, Magdalena Hennecke, Anchel de Jaime-Soguero, Matthias Ostermaier, Yu-Chih Lin, Anja Ciprianidis, Janina Hattemer, Ulrike Engel, Petra Beli, Holger Bastians, Sergio P Acebrón Wnt signaling recruits KIF2A to the spindle to ensure chromosome congression and alignment during mitosis. Proceedings of the National Academy of Sciences of the United States of America 2021-12-13 [PMID: 34417301]

Watson JL, Krüger LK, Ben-Sasson AJ et al. Synthetic Par polarity induces cytoskeleton asymmetry in unpolarized mammalian cells Cell 2023-10-12 [PMID: 37774705] (ICC/IF, Mouse)

Shankar S, Hsu ZT, Ezquerra A et al. A γ-tubulin complex-dependent pathway suppresses ciliogenesis by promoting cilia disassembly Cell reports 2022-11-15 [PMID: 36384111] (WB, Human)

So C, Seres K. B, et al. A liquid-like spindle domain promotes acentrosomal spindle assembly in mammalian oocytes. Science 2019-06-28 [PMID: 31249032] (ICC/IF, Sheep, Bovine, Mouse, Porcine)

Steblyanko, Y, Rajendraprasad, G Et al. Microtubule poleward flux in human cells is driven by the coordinated action of four kinesins. EMBO J 2020-12-01 [PMID: 33073400] (IF/IHC, Drosophila melanogaster)

Tay A, Melosh N Mechanical Stimulation after Centrifuge-Free Nano-Electroporative Transfection Is Efficient and Maintains Long-Term T Cell Functionalities Small (Weinheim an der Bergstrasse, Germany) 2021-08-15 [PMID: 34396686]

Gwon D, Hong J et al. c-Cbl Acts as an E3 Ligase Against DDA3 for Spindle Dynamics and Centriole Duplication during Mitosis. Mol Cells 2019-12-31 [PMID: 31722512] (WB, ICC/IF, Human)

Miller KE, Session AM, Heald R Kif2a Scales Meiotic Spindle Size in Hymenochirus boettgeri Curr. Biol. 2019-09-23 [PMID: 31630945]

Chen MH, Liu Y, Wang YL et al. KIF2A regulates the spindle assembly and the metaphase I-anaphase I transition in mouse oocyte. Sci Rep. 2016-12-19 [PMID: 27991556] (ICC/IF, Mouse)

Yi ZY, Ma XS, Liang QX et al. Kif2a regulates spindle organization and cell cycle progression in meiotic oocytes. Sci Rep. 2016-12-19 [PMID: 27991495] (ICC/IF, WB, Mouse)

Bendre S, Rondelet A, Hall C et al. GTSE1 tunes microtubule stability for chromosome alignment and segregation by inhibiting the microtubule depolymerase MCAK. J. Cell Biol. 2016-12-05 [PMID: 27881713] (Human)

Uematsu K, Okumura F, Tonogai S et al. ASB7 regulates spindle dynamics and genome integrity by targeting DDA3 for proteasomal degradation. J. Cell Biol. 2016-10-10 [PMID: 27697924] (WB, Human)

More publications at http://www.novusbio.com/NB500-180

Procedures

Western Blot protocol for Kif2a Antibody (NB500-180)

Western Blot Protocol
1. Perform SDS-PAGE on samples to be analyzed, loading 40 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 rabbit anti-Kif2a 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%.

Immunocytochemistry/Immunofluorescence protocol for Kif2a Antibody (NB500-180)

Immunocytochemistry Protocol

Culture cells to appropriate density on suitable glass coverslips 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 5-10 minutes.
2. Remove the formalin and add 0.5% Triton-X 100 in TBS to permeabilize the cells. Incubate for 5-10 minutes.
3. Remove the permeabilization buffer and add wash buffer (i.e. PBS or PBS with 0.1% Tween-20). Be sure to not let the specimen dry out. Gently wash three times for 10 minutes.
4. Alternatively, cells can be fixed with -20C methanol for 10 min at room temperature. Remove the methanol and rehydrate in PBS for 10 min before proceeding.
5. To block nonspecific antibody binding incubate in 10% normal goat serum for 1 hour at room temperature.
6. Add primary antibody at appropriate dilution and incubate at room temperature for 1 hour or at 4 degrees C overnight.
7. Remove primary antibody and replace with wash buffer. Gently wash three times for 10 minutes.
8. Add secondary antibody at the appropriate dilution. Incubate for 1 hour at room temperature.
9. Remove antibody and replace with wash buffer. Gently wash three times for 10 minutes.
10. Nuclei can be staining with 4',6' diamino phenylindole (DAPI) at 0.1 ug/ml, or coverslips can be directly mounted in media containing DAPI.
11. Cells can now be viewed with a fluorescence microscope.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow proper laboratory procedures for the disposal of formalin.

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Products Related to NB500-180

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
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.

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