Product Datasheet

Eg5 Antibody NB500-181

Unit Size: 0.1 ml

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

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NB500-181

Eg5 Antibody

Application Notes

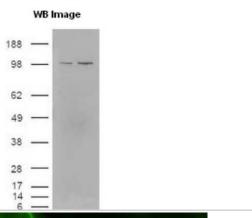
| Eg5 Antibody | |
|-----------------------------|---|
| Product Information | |
| Unit Size | 0.1 ml |
| Concentration | This product is unpurified. The exact concentration of antibody is not quantifiable. |
| Storage | Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles. |
| Clonality | Polyclonal |
| Preservative | No Preservative |
| Isotype | IgG |
| Purity | Unpurified |
| Buffer | Whole antisera |
| Target Molecular Weight | 125 kDa |
| Product Description | |
| Host | Rabbit |
| Gene ID | 3832 |
| Gene Symbol | KIF11 |
| Species | Human, Mouse, Rat, Porcine, Drosophila, Mammal, Plant |
| Reactivity Notes | Predicted to react with most mammalian species. Drosophila reactivity reported in scientific literature (PMID: 23888285). Mouse reactivity reported in scientific literature (PMID: 27117404). Plant reactivity reported in scientific literature (PMID: 19527496). |
| Immunogen | A recombinant segment of the coiled-coil domain of human Eg5 [Uniprot: P52732] |
| Product Application Details | |
| Applications | Western Blot, Immunoblotting, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation |
| Recommended Dilutions | Western Blot 1:1000, Immunocytochemistry/ Immunofluorescence 1:1000, Immunoprecipitation 1:10-1:500, Immunoblotting reported in scientific literature (PMID 28392145) |



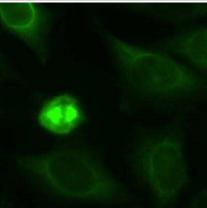
A band at ~125 kDa can be detected by Western blot.

Images

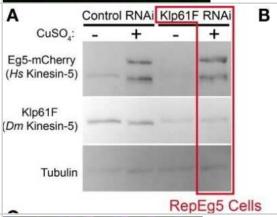
Western Blot: Eg5 Antibody [NB500-181] - Cells were transfected with the pCMV6-ENTRY control or pCMV6-ENTRY KIF11 cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-Eg5.



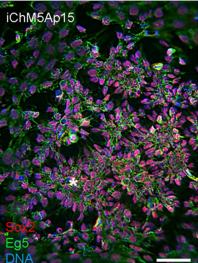
Immunocytochemistry/Immunofluorescence: Eg5 Antibody [NB500-181] - Staining of HeLa cells fixed in 3.5% paraformaldehyde. Cytoplasmic staining during interphase and spindle staining during mitosis.



Western Blot: Eg5 Antibody [NB500-181] - Human Eg5 rescues depletion of the Drosophila kinesin-5 family member Klp61F. Western blot analysis of cell lysates prepared from induced and uninduced; control and Klp61F RNAi-treated cells blotted with anti-Eg5 to monitor induction of Eg5-mCherry, anti-Klp61F to confirm depletion of the motor and anti-alpha-tubulin as a loading control. Cells depleted of Klp61F and with Eg5-mCherry induced are referred to as RepEg5 cells. Image collected and cropped by CiteAb from the following publication (https://journal.frontiersin.org/article/10.3389/fonc.2013.00187/abstract), licensed under a CC-BY license.



Immunocytochemistry/ Immunofluorescence: Eg5 Antibody [NB500-181] - Spontaneous assembly of rosettes in iChM5 derivatives. Feeder free cultures iChM5Ap15 & iChM5Bp28 cells in chamber slides were immunostained as indicated. Left panel, emerging rosettes among self-renewing iPSCs; grayscale inset shows 1x magnification of immunostaining of Oct4 alone. Middle panel shows Nanog staining alone with inset at 2X magnification showing presumptive centrosomes (arrows). Bottom left panel shows forming rosettes immunopositive for Sox2 & Eg5. Bottom right panel shows low magnification image of immunostaining of Sox2 in this iChM5Ap15 culture, showing that virtually all cells were immunopositive. Grey scale inset shows representative forming rosette. Asterisks (*) in each panel indicates example of forming rosette. Scale bar, 50 microns. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25426336), licensed under a CC-BY



license. Not internally tested by Novus Biologicals.

Publications

Ogmen K, Dobbins S, Martinez-Corral I et al. Insights intoKIF11pathogenesis in Microcephaly-Lymphedema-Chorioretinopathy syndrome: a lymphatic perspective medRxiv 2023-11-04

Didaskalou S, Efstathiou C, Galtsidis S et al. HURP localization in metaphase is the result of a multi-step process requiring its phosphorylation at Ser627 residue Frontiers in cell and developmental biology 2023-07-05 [PMID: 37484914] (WB, Human)

Uniyal A, Shantanu PA, Vaidya S et al. Tozasertib Attenuates Neuropathic Pain by Interfering with Aurora Kinase and KIF11 Mediated Nociception ACS chemical neuroscience 2021-06-02 [PMID: 34027667]

AA Zalenski, S Majumder, K De, M Venere An interphase pool of KIF11 localizes at the basal bodies of primary cilia and a reduction in KIF11 expression alters cilia dynamics Sci Rep, 2020-08-18;10(1):13946. 2020-08-18 [PMID: 32811879] (IP, Human)

Vargas-Hurtado D, Brault JB, Piolot T et al. Differences in Mitotic Spindle Architecture in Mammalian Neural Stem Cells Influence Mitotic Accuracy during Brain Development Curr. Biol. 2019-09-23 [PMID: 31495584]

Mann BJ, Wadsworth P. Distribution of Eg5 and TPX2 in Mitosis: Insight from CRISPR tagged Cells Cytoskeleton (Hoboken) 2018-08-19 [PMID: 30123975] (WB, ICC/IF, Human)

Letort G, Bennabi I, Dmitrieff S et al. A computational model of the early stages of acentriolar meiotic spindle assembly. Mol. Biol. Cell 2019-01-16 [PMID: 30650011] (ICC/IF, Mouse)

Wan X, Zhang Y, Lan M et al. Meiotic arrest and spindle defects are associated with altered KIF11 expression in porcine oocytes Environ. Mol. Mutagen. 2018-08-28 [PMID: 30151839] (WB, Porcine)

Bickel KG, Mann BJ, Waitzman JS et al. Src family kinase phosphorylation of the motor domain of the human kinesin-5, Eg5. Cytoskeleton (Hoboken). 2017-06-23 [PMID: 28646493] (WB, Human)

Nalawansha DA, Gomes ID, Wambua MK, Pflum MKH. HDAC Inhibitor-Induced Mitotic Arrest Is Mediated by Eg5/KIF11 Acetylation. Cell Chem Biol. 2017-04-20 [PMID: 28392145]

Liu Y, Wang Y, Du Z et al. Fbxo30 Regulates Mammopoiesis by Targeting the Bipolar Mitotic Kinesin Eg5. Cell Rep. 2016-04-20 [PMID: 27117404] (ICC/IF, Mouse)

Drechsler H, McAinsh AD. Kinesin-12 motors cooperate to suppress microtubule catastrophes and drive the formation of parallel microtubule bundles. Proc. Natl. Acad. Sci. U.S.A. 2016-03-22 [PMID: 26969727] (WB, Human)

More publications at http://www.novusbio.com/NB500-181





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Products Related to NB500-181

NBL1-12284 Eg5 Overexpression Lysate

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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