

Kinesin 5B Polyclonal Antibody

Product Details

| | |
|--------------------|--------------------------------------------------------------------------|
| Size | 100 µg |
| Species Reactivity | Human, Mouse, Rat |
| Published Species | Mouse |
| Host/Isotope | Rabbit / IgG |
| Class | Polyclonal |
| Type | Antibody |
| Conjugate | Unconjugated |
| Immunogen | Synthetic Peptide: C I(376) D E Q F D K E K A N L E A F T V D K D I(396) |
| Form | Liquid |
| Concentration | 1 mg/mL |
| Purification | Antigen affinity chromatography |
| Storage buffer | PBS with 1mg/mL BSA |
| Contains | 0.05% sodium azide |
| Storage Conditions | -20° C, Avoid Freeze/Thaw Cycles |
| RRID | AB_2234330 |

| Applications | Tested Dilution | Publications |
|---------------------------|-----------------|---------------|
| Immunocytochemistry (ICC) | 1:250 | - |
| Immunofluorescence (IF) | 1:250 | - |
| Immunoprecipitation (IP) | 5 µg | - |
| Western Blot (WB) | 1:2000-1:6000 | 1 Publication |

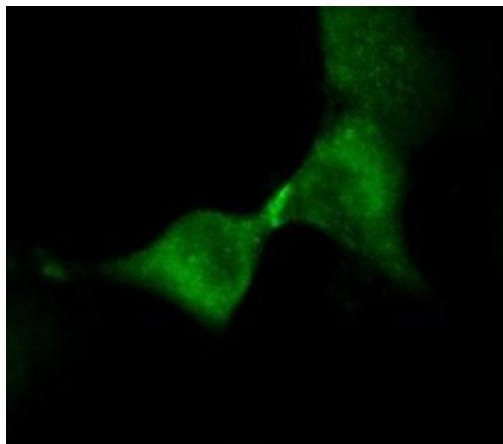
Product Specific Information

PA1-643 detects kinesin 5B from mouse and human samples. This antibody is specific for kinesin 5B and does not detect other kinesin isoforms.

PA1-643 has been successfully used in Western blot and immunofluorescent procedures. By Western blot, this antibody detects an ~110 kDa protein representing kinesin 5B protein.

The PA1-643 immunizing peptide corresponds to amino acid residues 376-396 from human kinesin 5B. This sequence is 95% and 90% conserved for mouse and rat, respectively. This peptide (Cat. # PEP-198) is available for use in neutralization and control experiments.

Product Images For Kinesin 5B Polyclonal Antibody

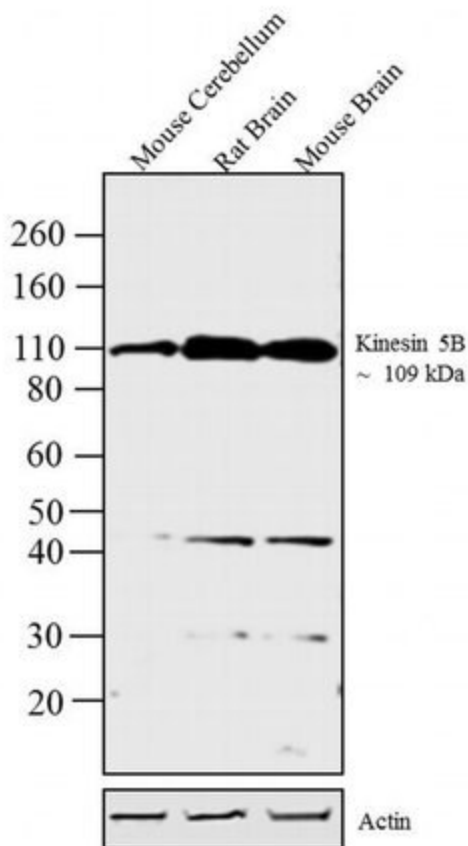


Kinesin 5B Antibody (PA1-643) in IF

Immunofluorescent analysis of Kinesin 5B (green) in HeLa cells. Cells fixed in 3.2% paraformaldehyde and permeabilized with 0.2% Triton X-100 for 30 minutes at 37°C were blocked with 3% BSA in PBS for 30 minutes at room temperature. Cells were probed with a Kinesin 5B polyclonal antibody (Product # PA1-643) at a dilution of 1:250 overnight at 4°C, washed with PBS containing 0.2% Triton X-100, and incubated with a fluorescently-conjugated goat anti-rabbit IgG secondary antibody at a dilution of 1:2000 for 1 hour at room temperature. Images were taken on wide-field fluorescent microscope at 63X magnification. Data courtesy of the Innovators Program.

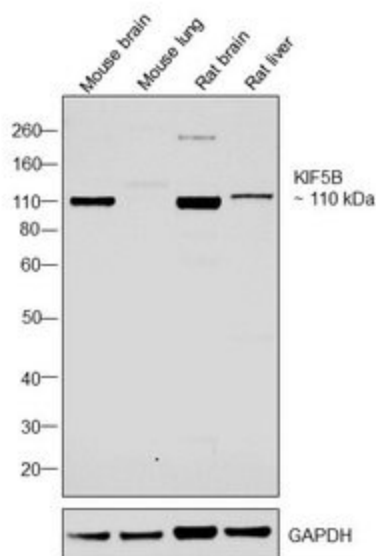
Kinesin 5B Antibody (PA1-643) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of Mouse Cerebellum (Lane 1), Rat Brain (Lane 2) and Mouse Brain (Lane 3). The blots were probed with Anti-Kinesin 5B Rabbit Polyclonal Antibody (Product # PA1-643, 1:4000-1:6000 dilution) and detected by chemiluminescence using Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.4 µg/mL, 1:2500 dilution). A 109 kDa band corresponding to Kinesin 5B was observed across tissues tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



Kinesin 5B Antibody (PA1-643) in WB

Western blot was performed using Anti-Kinesin 5B Polyclonal Antibody, (Product # PA1-643) and a 110 kDa band corresponding to KIF5B was observed in the tissues tested. Whole cell extracts (40 µg lysate) of Mouse brain (Lane 1), Mouse lung (Lane 2), Rat brain (Lane 3) and Rat liver (Lane 4) were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:2000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (H+L), Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



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1 Reference

Western Blot (1)

Biochemistry

Conventional kinesin holoenzymes are composed of heavy and light chain homodimers.

"PA1-643 was used in western blot to investigate the composition of the kinesin holoenzymes"

Authors: DeBoer SR, You Y, Szodorai A, Kaminska A, Pigino G, Nwabuisi E, Wang B, Estrada-Hernandez T, Kins S, Brady ST, Morfini G

Species
Mouse

Dilution
1:1000

Year
2008

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