

Kinesin 5A Polyclonal Antibody

| Product Details | |
|--------------------|--|
| Size | 100 µg |
| Species Reactivity | Bovine, Human, Mouse |
| Published Species | Mouse, Human |
| Host/Isotype | Rabbit / IgG |
| Class | Polyclonal |
| Type | Antibody |
| Conjugate | Unconjugated |
| Immunogen | Synthetic Peptide: C(1007) G Y E A E D Q A K L F P L H Q E T A A S(1027) |
| 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_2132216 |

| Applications | Tested Dilution | Publications |
|------------------------------|-----------------|----------------|
| Western Blot (WB) | 0.5-2 µg/mL | 4 Publications |
| Immunocytochemistry (ICC/IF) | 1-2 µg/mL | - |
| Immunoprecipitation (IP) | - | 1 Publication |

Product Specific Information

PA1-642 detects kinesin 5A from mouse, human, and bovine samples. This antibody is specific for kinesin 5A and does not detect other kinesin isotypes.

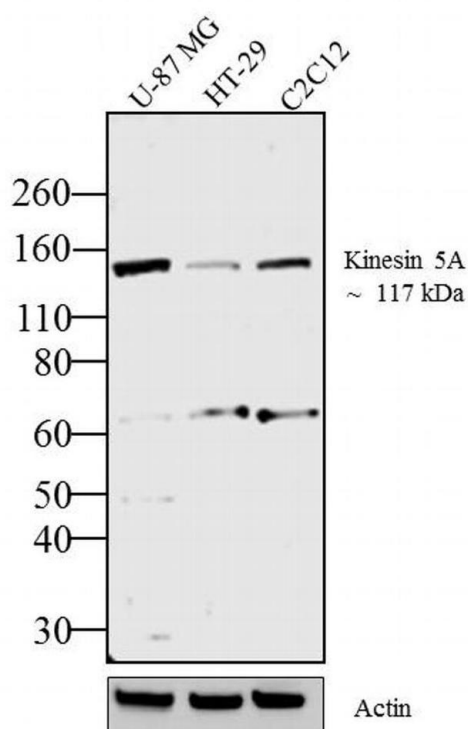
PA1-642 has been successfully used in Western blot procedures. By Western blot, this antibody detects an ~110 kDa protein representing kinesin 5A from mouse neuronal cell lysate and human retinal extracts.

The PA1-642 immunizing peptide corresponds to amino acid residues 1007-1027 from mouse kinesin 5A. This sequence is completely conserved in human. This peptide (Cat. # PEP-197) is available for use in neutralization and control experiments.

Product Images For Kinesin 5A Polyclonal Antibody

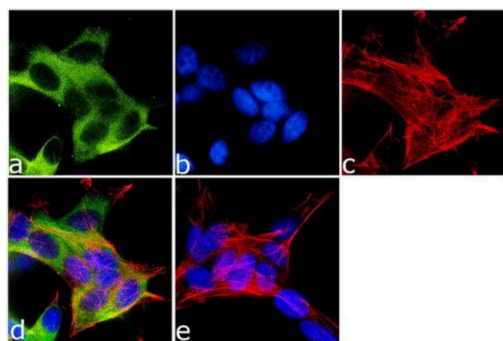
Kinesin 5A Antibody (PA1-642) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of U-87 MG (Lane 1), HT-29 (Lane 2) and C2C12 (lane 3). The blots were probed with Anti-Kinesin 5A Rabbit Polyclonal Antibody (Product # PA1-642, 0.5-2 µg/mL) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.4 µg/mL, 1:2500 dilution). A 117 kDa corresponding to Kinesin 5A was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 10 % Bis-Tris gel (Product # NP0302BOX), 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 5A Antibody (PA1-642) in ICC/IF

Immunofluorescence analysis of Kinesin 5A was done on 70% confluent log phase SH-SY5Y cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with Kinesin 5A Rabbit Polyclonal Antibody (Product # PA1-642) at 1 µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d is a merged image showing cytoplasmic localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.



[View more figures on thermofisher.com](https://www.thermofisher.com)

5 References

Western Blot (4)

Frontiers in cellular neuroscience

Truncated Tau Induces Mitochondrial Transport Failure Through the Impairment of TRAK2 Protein and Bioenergetics Decline in Neuronal Cells.

"Published figure using Kinesin 5A polyclonal antibody (Product # PA1-642) in Western Blot"

Authors: Quintanilla RA, Tapia-Monsalves C, Vergara EH, Pérez MJ, Aranguiz A

Year
2020

Species
Mouse

Dilution
1:500

Journal of neurotrauma

Neurochemical profile of dementia pugilistica.

"PA1-642 was used in western blot to study the biochemical/molecular changes associated with dementia pugilistica"

Authors: Kokjohn TA, Maarouf CL, Dausgs ID, Hunter JM, Whiteside CM, Malek-Ahmadi M, Rodriguez E, Kalback W, Jacobson SA, Sabbagh MN, Beach TG, Roher AE

Year
2013

Species
Human

[View more WB references on thermofisher.com](#)

Immunoprecipitation (1)

PloS one

Disparate Regulatory Mechanisms Control Fat3 and P75NTR Protein Transport through a Conserved Kif5-Interaction Domain.

"PA1642 was used in immunoprecipitation and western blot to elucidate the regulation of Fat3 localization"

Authors: Cheng H, Burroughs-Garcia J, Birkness JE, Trinidad JC, Deans MR

Year
2017

Species
Human

More applications with references on thermofisher.com

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