


Anti-KIF5A antibody ab118534

[2 References](#) [3 Images](#)

Overview

Product name	Anti-KIF5A antibody
Description	Rabbit polyclonal to KIF5A
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide corresponding to Human KIF5A (internal sequence) conjugated to keyhole limpet haemocyanin. Database link: NP_004975.2
Positive control	Human Brain, cortex tissue; K562 cell lysate; K562 cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: 99% PBS
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab118534 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.5 - 1 µg/ml. Predicted molecular weight: 117 kDa.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC		Use a concentration of 5 µg/ml.

Target

Function

Microtubule-dependent motor required for slow axonal transport of neurofilament proteins (NFH, NFM and NFL).

Tissue specificity

Distributed throughout the CNS but is highly enriched in subsets of neurons.

Involvement in disease

Defects in KIF5A are the cause of spastic paraplegia autosomal dominant type 10 (SPG10) [MIM:604187]. An inherited degenerative spinal cord disorder characterized by a slow, gradual, progressive weakness and spasticity (stiffness) of the legs. Rate of progression and the severity of symptoms is quite variable. Initial symptoms may include difficulty with balance, weakness and stiffness in the legs, muscle spasms, and dragging the toes when walking. In some forms of the disorder, bladder symptoms (such as incontinence) may appear, or the weakness and stiffness may spread to other parts of the body.

Sequence similarities

Belongs to the kinesin-like protein family. Kinesin subfamily.
Contains 1 kinesin-motor domain.

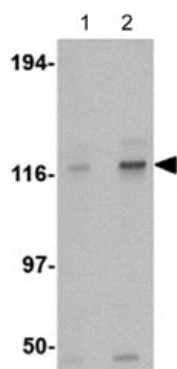
Domain

Composed of three structural domains: a large globular N-terminal domain which is responsible for the motor activity of kinesin (it hydrolyzes ATP and binds microtubule), a central alpha-helical coiled coil domain that mediates the heavy chain dimerization; and a small globular C-terminal domain which interacts with other proteins (such as the kinesin light chains), vesicles and membranous organelles.

Cellular localization

Cytoplasm > perinuclear region. Cytoplasm > cytoskeleton. Concentrated in the cell body of the neurons, particularly in the perinuclear region.

Images



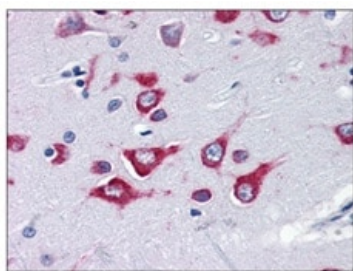
Western blot - Anti-KIF5A antibody (ab118534)

Lane 1 : Anti-KIF5A antibody (ab118534) at 0.5 µg/ml

Lane 2 : Anti-KIF5A antibody (ab118534) at 1 µg/ml

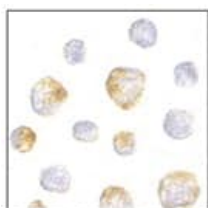
All lanes : K562 cell lysate

Predicted band size: 117 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KIF5A antibody (ab118534)

Human Brain, Cortex tissue (formalin-fixed, paraffin-embedded) stained with ab118534 at 5 µg/ml followed by biotinylated goat anti-rabbit IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.



Immunocytochemistry - Anti-KIF5A antibody (ab118534)

Immunocytochemical analysis of KIF5A expression in K562 cells using ab118534 at 5 µg/ml.

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