Datasheet for ABIN968407

anti-KIF11 antibody (AA 324-532)

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Overview

Quantity:	150 µg
Target:	KIF11
Binding Specificity:	AA 324-532
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This KIF11 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human Eg5 aa. 324-532
Clone:	20-EG5
Isotype:	IgG1
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	KIF11
Alternative Name:	Eg5 (KIF11 Products)
Background:	The mitotic spindle apparatus equally distributes duplicated chromosomes to daughter cells. This process is mediated by the dynamic instability of the spindle microtubules and the forces generated by the action of cytoplasmic dynein and kinesin-related motor proteins (KRPs), such as CHO1/MKLP1. These motors hydrolyze ATP as they move progressively along the microtubules. They organize the microtubules into bipolar spindles and may also serve as bridges between microtubules and chromosome kinetochores or centrosomes. Eg5, identified in Xenopus laevis, is a plus-end directed KRP, associated with the mitotic spindle. Vertebrate Eg5 is a member of the KRP subfamily bimC. These family members share a high degree of sequence homology (>80% within the N-terminal motor domain) and may execute similiar functions. During mitosis, Eg5 is specifically phosphorylated at Thr-297, an evolutionarily conserved cdc2 phosphorylation site, by p34[cdc2]/cyclin B. Inhibition of phosphorylation blocks the interaction of Eg5 with centrosomes. Thus, Eg5 is a mitotic motor protein that regulates spindle formation in a phosphorylation-dependent manner. This antibody is routinely tested by western blot analysis.
Molecular Weight:	120 kDa

Application Details

Comment:	Related Products: ABIN968536, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

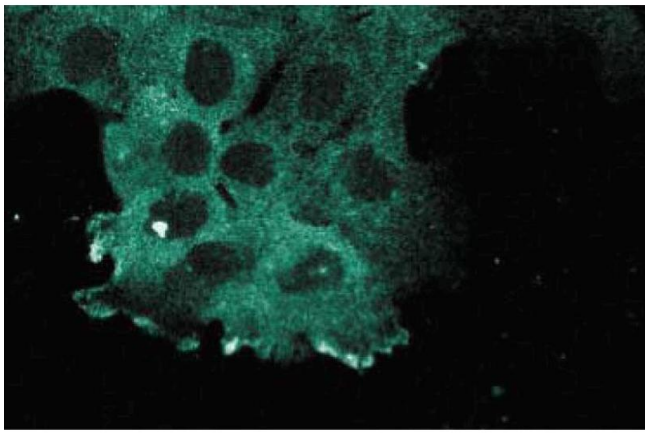
Publications

Product cited in:

Ferhat, Cook, Chauviere, Harper, Kress, Lyons, Baas: "Expression of the mitotic motor protein Eg5 in postmitotic neurons: implications for neuronal development." in: **The Journal of neuroscience : the official journal of the Society for Neuroscience**, Vol. 18, Issue 19, pp. 7822-35, (1998) (PubMed).

Blangy, Lane, dHérin, Harper, Kress, Nigg: "Phosphorylation by p34cdc2 regulates spindle association of human Eg5, a kinesin-related motor essential for bipolar spindle formation in vivo." in: **Cell**, Vol. 83, Issue 7, pp. 1159-69, (1996) (PubMed).

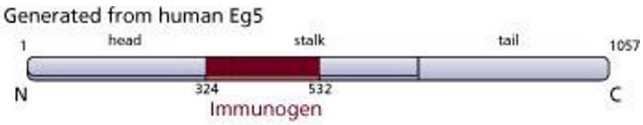
Images



Immunofluorescence

Image 1. Immunofluorescence staining of A431 cells.

Image 2.



Western Blotting

Image 3. Western blot analysis of Eg5 on a human endothelial cell lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the anti- human Eg5 antibody.