

## Product datasheet

### Anti-Eg5 antibody [EPR12280-76] $\alpha$ b181981

Recombinant RabMAb

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

#### Overview

Product name	Anti-Eg5 antibody [EPR12280-76]
Description	Rabbit monoclonal [EPR12280-76] to Eg5
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB, ICC/IF
Species reactivity	<b>Reacts with:</b> Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	Raji, HeLa and K562 cell lysates
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</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. Avoid freeze / thaw cycle.
Storage buffer	<p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 0.05% BSA, 59% PBS, 40% Glycerol (glycerin, glycerine)</p>
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR12280-76
Isotype	IgG

#### Applications

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab181981 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		1/1000 - 1/10000. Predicted molecular weight: 119 kDa.
ICC/IF	★★★★★ (1)	1/100.

## Target

### Function

Motor protein required for establishing a bipolar spindle. Blocking of KIF11 prevents centrosome migration and arrest cells in mitosis with monoastal microtubule arrays.

### Involvement in disease

Defects in KIF11 are the cause of microcephaly with or without chorioretinopathy, lymphedema, or mental retardation (MCLMR) [MIM:152950]. An autosomal dominant disorder that involves an overlapping but variable spectrum of central nervous system and ocular developmental anomalies. Microcephaly ranges from mild to severe and is often associated with mild to moderate developmental delay and a characteristic facial phenotype with upslanting palpebral fissures, broad nose with rounded tip, long philtrum with thin upper lip, prominent chin, and prominent ears. Chorioretinopathy is the most common eye abnormality, but retinal folds, microphthalmia, and myopic and hypermetropic astigmatism have also been reported, and some individuals have no overt ocular phenotype. Congenital lymphedema, when present, is typically confined to the dorsa of the feet, and lymphoscintigraphy reveals the absence of radioactive isotope uptake from the webspaces between the toes.

### Sequence similarities

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

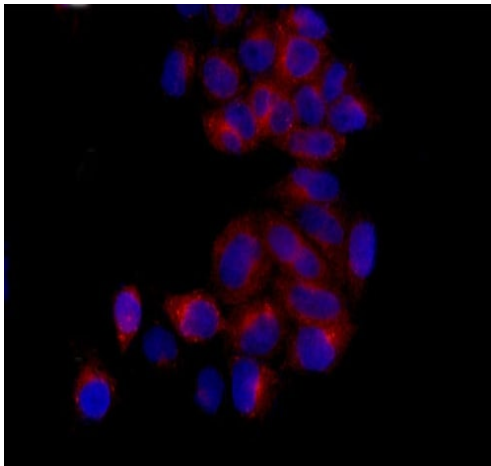
### Post-translational modifications

Phosphorylated exclusively on serine during S phase, but on both serine and Thr-926 during mitosis, so controlling the association of KIF11 with the spindle apparatus (probably during early prophase). Phosphorylated upon DNA damage, probably by ATM or ATR.  
A subset of this protein primarily localized at the spindle pole is phosphorylated by NEK6 during mitosis; phosphorylation is required for mitotic function.

### Cellular localization

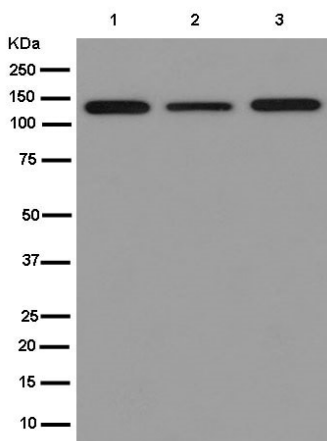
Cytoplasm. Cytoplasm > cytoskeleton > spindle pole.

## Images



Immunocytochemistry/ Immunofluorescence - Anti-Eg5 antibody [EPR12280-76] (ab181981)

Immunofluorescence analysis of -20 $\mu$ l acetone fixed HeLa cells labeling Eg5 with ab181981 at 1/100 dilution, followed by goat anti rabbit IgG (Dylight 555) at a 1/1000 dilution. Counter stained with Dapi.



Western blot - Anti-Eg5 antibody [EPR12280-76] (ab181981)

**All lanes** : Anti-Eg5 antibody [EPR12280-76] (ab181981) at 1/10000 dilution

**Lane 1** : Raji cell lysate

**Lane 2** : HeLa cell lysate

**Lane 3** : K562 cell lysate

Lysates/proteins at 20  $\mu$ g per lane.

#### Secondary

**All lanes** : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 119 kDa

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Eg5 antibody [EPR12280-76] (ab181981)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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