Datasheet for ABIN1607602

# anti-KIF11 antibody

1 Image

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## Overview

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| Quantity: | 100 µL |
| Target: | KIF11 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Application: | Western Blotting (WB), ELISA, Immunohistochemistry (IHC) |

## Product Details

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| Immunogen: | Eg5 was prepared from whole rabbit serum produced by repeated immunizations with a truncated Eg5 construct expressed in E. coli corresponding to human Eg5 protein. Immunogen Type: Recombinant Protein |
| Cross-Reactivity (Details): | Cross reactivity with Eg5 from other sources have not been determined. |
| Purity: | Anti-Eg5 is directed against the human Eg5 protein. The product was prepared from monospecific antiserum by delipidation and defibrination. A BLAST analysis was used to suggest reactivity with human. |
| Endotoxin Level: | Low Endotoxin : No |

## Target Details

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| Target: | KIF11 |
| Alternative Name: | Eg5 (KIF11 Products) |
| Background: | Eg5 (also known as kinesin-5 and KIF11) is a homo-tetramer which cross-links anti-parallel |

## Target Details

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| | microtubules in the mitotic spindle to maintain spindle bipolarity. Eg5, a member of the Kinesin-5 subclass of kinesins, is a plus-end-directed tetrameric kinesin-family protein that influences the assembly and organization of the mitotic spindle, a self-assembled and dynamic microtubule-based structure that orchestrates chromosome segregation in dividing cells. Eg5 action is essential: when it is depleted from the cytoplasm of meiotically-mature Xenopus laevis eggs, abnormal monopolar spindles form, preventing successful division. Eg5 is expressed in all cells during mitosis and in post-mitotic neurons during development. In developing neurons pharmacological inhibition and siRNA knockdown of Eg5 results in longer axons, more branches, fewer bouts of axon retraction and the inability of growth cones to turn on contact with repulsive substrates. In migratory neurons, inhibition of Eg5 causes neurons to migrate in a random pattern and form shorter leading processes. In adult neurons, Eg5 has a similar effect on inhibiting the rate of short microtubule transport so pharmacological inhibition of adult Eg5 (i.e Monastrol) may be a potential therapeutic tool for the augmentation of adult axon regeneration. Synonyms: Kinesin-5, KIF11 |
| Gene ID: | 3799 |
| NCBI Accession: | NP_004512 |
| UniProt: | P33176 |

## Application Details

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| Application Notes: | Eg5 antibody has been tested for use in ELISA and western blot. For western blots expect a band of approximately 72 kDa in size corresponding to truncated kinesin-1 protein. Specific conditions for reactivity should be optimized by the end user.<br>ELISA Dilution: 1:10.000<br>Western Blot Dilution: 1:1000 |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Concentration: | 46 mg/mL |
| Buffer: | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| Storage: | 4 °C/-20 °C |
| Storage Comment: | Store vial at -20 °C prior to opening. Aliquot contents and freeze at -20 °C or below for extended |

## Handling

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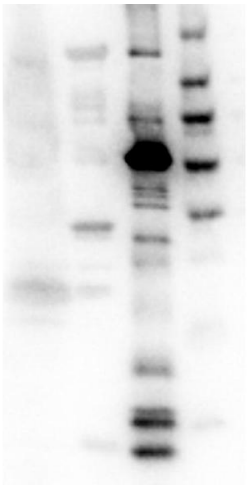
| | storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to immediate use. |
| Expiry Date: | Expiration date is one (1) year from date of opening. |

## Images



**Western Blotting**

**Image 1.** Western Blot of Rabbit Anti-Eg-5 antibody. Lane 1: E.coli cell lysate expressing histidine tagged protein. Lane 2: Mouse brain lysate. Lane 3: Recombinant truncated Eg-5. Load: 35 µg per lane for cell lysate. 50 ng of recombinant protein Primary antibody: Eg-5 antibody at 1:1000 for overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody at 1:40,000 for 60 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 120 kDa and 72 kDa for Eg5.