

Anti-Eg5 (RABBIT) Antibody
Eg5 Antibody
Catalog # ASR3753**Specification**

Anti-Eg5 (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Eg5 antibody has been tested by 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. This antibody is suitable for use in ELISA.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
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.
Preservative	0.01% (w/v) Sodium Azide

Anti-Eg5 (RABBIT) Antibody - Additional Information**Gene ID** 3832**Other Names**
3799**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. Cross-reactivity with Eg5 from other sources have not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended 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.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Eg5 (RABBIT) Antibody - Protein Information

Name KIF11

Synonyms EG5, KNSL1, TRIP5

Function

Motor protein required for establishing a bipolar spindle and thus contributing to chromosome congression during mitosis (PubMed:19001501, PubMed:37728657). Required in non-mitotic cells for transport of secretory proteins from the Golgi complex to the cell surface (PubMed:23857769).

Cellular Location

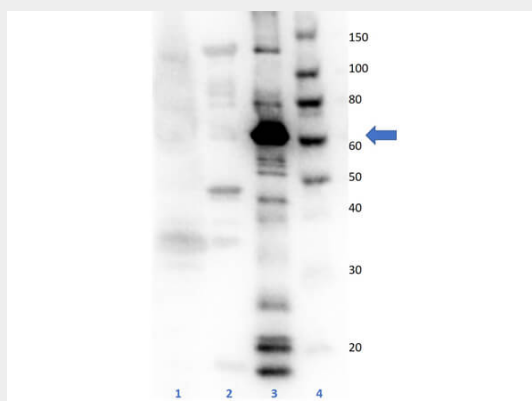
Cytoplasm. Cytoplasm, cytoskeleton, spindle pole

Anti-Eg5 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Eg5 (RABBIT) Antibody - Images



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. Lane 4: MW Markers. Load: 35 µg/lane for cell lysate, 50ng of recombinant protein. Primary antibody: Eg-5 antibody at 1:1000 for overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody (p/n 611-103-122) 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.

Anti-Eg5 (RABBIT) Antibody - Background

Eg5 (also known as kinesin-5 and KIF11) is a homo-tetramer which cross-links anti-parallel 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.