

## Purified anti-Eg5

**Catalog #/** 627801 / 25 µg  
**Size:** 627802 / 100 µg

**Clone:** 10C7/Eg5

**Isotype:** Mouse IgG1, κ

**Immunogen:** Amino Acid: 200-500 of human Eg5

**Reactivity:** Human, Mouse

**Preparation:** The antibody was purified by affinity chromatography.

**Formulation:** This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide at 0.5 mg/ml.

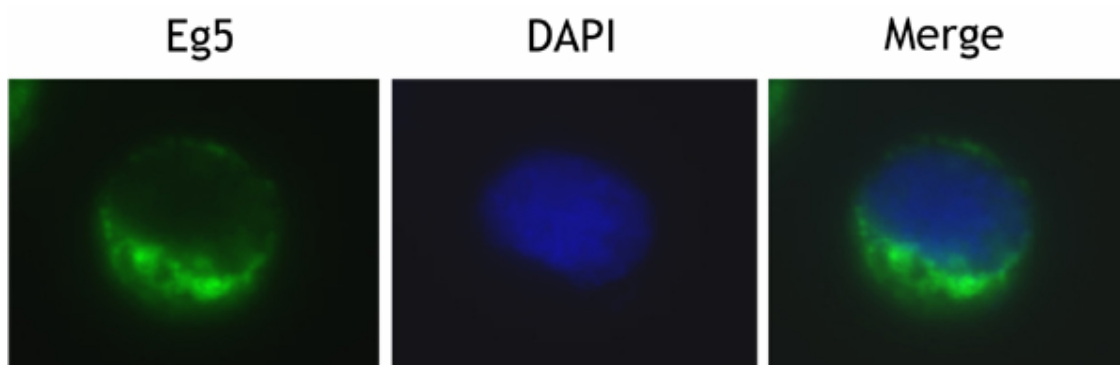
**Storage:** The antibody solution should be stored undiluted at 4 °C.

## Applications

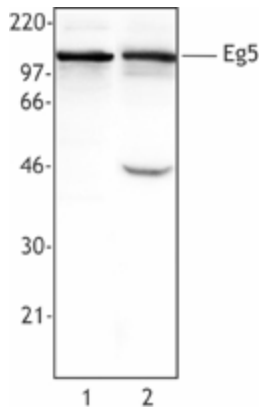
**Applications:** WB, IP, IF

**Application  
References:** 1. Chou, H-Y. E., *et al.*, 2006. *J. Biol. Chem.* 281:15201.

**Recommended  
Usage:** Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 5 µg antibody per 5 ml antibody dilution buffer for each mini-gel. For immunofluorescent staining applications: use a starting dilution 4 µg/ml is recommended. It is recommended that the reagent be titrated for optimal performance for each application.



**Figure 1.** HeLa cells stained with purified mouse monoclonal antibody against Eg5 (clone 10C7/Eg5) followed by FITC conjugated donkey anti-mouse IgG and DAPI.



**Figure 2.** HeLa cell extract (Lane 1) or NIH3T3 cell extract (Lane 2) was resolved by electrophoresis, transferred to nitrocellulose and probed with monoclonal anti-Eg5 (Clone 10C7/Eg5) antibody. Proteins were visualized using a goat anti-mouse secondary conjugated to HRP and a chemiluminescence detection system.

## Antigen Information

**Other Names:** Kinesin-like protein KIF11, kinesin-related motor protein Eg5, kinesin-like spindle protein HKSP, thyroid receptor interacting protein 5 (TRIP5)

**Structure:** Kinesin-like protein family, BimC subfamily, kinesin motor catalytic, coiled-coil, Smc domains; 119 kD

**Distribution:** Centrosomes, spindle microtubules, intracellular bridge

**Function:** Motor protein required for establishing bipolar spindle

**Regulation:** Phosphorylation on Thr927 by Cdc2 allows association with spindle apparatus

**Modification:** Phosphorylation

**Interaction:** Thyroid hormone receptor in presence of thyroid hormone, Cdc2

**Description:** Eg5 (also known as kinesin-like protein KIF11, kinesin-related motor protein Eg5, kinesin-like spindle protein HKSP, and thyroid receptor interacting protein 5 (TRIP5)) is a 119 kD kinesin-like protein family, BimC subfamily. This protein is a catalytic kinesin motor with coiled-coil and Smc domains. Eg5 is localized at the centrosomes, spindle microtubules, and intracellular bridge. This motor protein is required for establishing the bipolar spindle. hEg5 is modified by phosphorylation on Thr927 by Cdc2 to allow association with the spindle apparatus. Eg5 has been shown to interact with the thyroid hormone receptor in presence of thyroid hormone and Cdc2. The 10C7/Eg5 monoclonal antibody has been shown to react with human and mouse Eg5 by Western blot.

### Antigen References:

1. Lee, J., *et al.*, 1995. *Mol. Endocrinol.* 9:243.
2. Blangy, A., *et al.*, 1995. *Cell* 83:1159.
3. Whitehead, C., *et al.*, 1998. *J. Cell Sci.* 111:2551.
4. DeBonis, S., *et al.*, 2003. *Biochemistry.* 42:338.