

## Purified anti-Eg5 Antibody

<b>Catalog# / Size</b>	627801 / 25 µg 627802 / 100 µg
<b>Clone</b>	10C7/Eg5
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Kinesin-like protein KIF11, kinesin-related motor protein Eg5, kinesin-like spindle protein HKSP, thyroid receptor interacting protein 5 (TRIP5)
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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.

### Product Details

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<b>Verified Reactivity</b>	Human, Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Amino Acid: 200-500 of human Eg5
<b>Formulation</b>	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide at 0.5 mg/ml.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">WB - Quality tested</a> <a href="#">ICC, IP - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">Western blotting</a> . Western blotting, suggested working dilution(s): Use 5 µg antibody per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application References</b>	1. Chou HYE, <i>et al.</i> 2006. <i>J. Biol. Chem.</i> 281:15201. 2. Ireland JT, <i>et al.</i> 2007. <i>P. Natl. Acad. Sci. USA</i> 104:16940. 3. Bartoli, KM., <i>et al.</i> 2011. <i>Mol Cell Biol.</i> 22:3420. <a href="#">PubMed</a> 4. Izumiya T, <i>et al.</i> 2012. <i>Gene.</i> 511:202. <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. Fang CT, <i>et al.</i> 2020. <i>Cell Death Dis.</i> 0.954861111. <a href="#">PubMed</a> 2. Bartoli K, <i>et al.</i> 2011. <i>Mol Biol Cell.</i> 3.291666667. <a href="#">PubMed</a> 3. Izumiya T, <i>et al.</i> 2012. <i>Gene.</i> 511:202. <a href="#">PubMed</a>
<b>RRID</b>	AB_2130964 (BioLegend Cat. No. 627801) AB_2130963 (BioLegend Cat. No. 627802)

### Antigen Details

<b>Structure</b>	Kinesin-like protein family, BimC subfamily, kinesin motor catalytic, coiled-coil, Smc domains; 119 kD
<b>Distribution</b>	Centrosomes, spindle microtubules, intracellular bridge
<b>Function</b>	Motor protein required for establishing bipolar spindle
<b>Interaction</b>	Thyroid hormone receptor in presence of thyroid hormone, Cdc2
<b>Modification</b>	Phosphorylation
<b>Biology Area</b>	Cell Biology, Cell Cycle/DNA Replication
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Lee J, <i>et al.</i> 1995. <i>Mol. Endocrinol.</i> 9:243.</li> <li>2. Blangy A, <i>et al.</i> 1995. <i>Cell</i> 83:1159.</li> <li>3. Whitehead C, <i>et al.</i> 1998. <i>J. Cell Sci.</i> 111:2551.</li> <li>4. DeBonis S, <i>et al.</i> 2003. <i>Biochemistry.</i> 42:338.</li> </ol>
<b>Regulation</b>	Phosphorylation on Thr927 by Cdc2 allows association with spindle apparatus
<b>Gene ID</b>	<a href="#">3832</a>

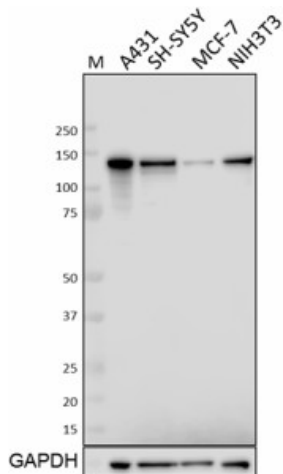
## Related Protocols

[Western Blotting Protocol](#)

## Other Formats

Purified anti-Eg5

## Product Data



Total cell lysates (15 µg total protein) from A431, SH-SY5Y, MCF-7 (reduced expression control), and NIH3T3 cells were resolved by 4-12% Bis-Tris gel electrophoresis, transferred to a nitrocellulose membrane, and probed with 0.5 µg/mL (1:1000 dilution) Purified anti-EG5 Antibody, clone 10C7, overnight at 4°C. Proteins were visualized by chemiluminescence detection using HRP goat anti-mouse IgG Antibody (Cat. No. 405306) at a 1:3000 dilution. Direct-Blot™ HRP anti-GAPDH Antibody (Cat. No. 607904) was used as a loading control at a 1:50000 dilution (lower). Lane M: Molecular Weight marker. Predicted expression data was obtained from Human Protein Atlas.

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