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orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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## NEK7 (C34C3) Rabbit mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 32	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q8TDX7	<b>Entrez-Gene Id:</b> 140609
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<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
<b>Specificity/Sensitivity</b>	NEK7 (C34C3) Rabbit mAb detects endogenous levels of total NEK7 protein.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the carboxy terminus of human NEK7.	
<b>Background</b>	NEK7 (NIMA-related protein kinase 7), is one of a family of serine/threonine kinases, named NEK1–NEK11, which are involved in the control of mitosis and other non-mitotic functions (1-6). NEK7 is the smallest NIMA-related kinase in mammals, and is widely expressed by many tissues (1-3). Its role in mitosis relates to centrosome enrichment and microtubule nucleation, and similar to other NIMA-related kinases, NEK7 is localized to the microtubule-organizing center (MTOC) at the time of mitotic entry (3,6). NEK7 has also been demonstrated to be essential for NLRP3 inflammasome activation by directly binding to the leucine-rich repeat (LRR) domain of NLRP3 (4-6).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>Kandli, M. et al. (2000) <i>Genomics</i> 68, 187-96.</li> <li>Belham, C. et al. (2003) <i>J Biol Chem</i> 278, 34897-909.</li> <li>O'regan, L. et al. (2007) <i>Cell Div</i> 2, 25.</li> <li>Shi, H. et al. (2016) <i>Nat Immunol</i> 17, 250-8.</li> <li>He, Y. et al. (2016) <i>Nature</i> 530, 354-7.</li> <li>Sun, Z. et al. (2020) <i>Front Physiol</i> 11, 606996.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	<b>IMPORTANT:</b> For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>W:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> Human
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