

#3057 Store at -20C

NEK7 (C34C3) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	32	Rabbit IgG	#Q8TDX7	140609

Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

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.

Specificity / Sensitivity

NEK7 (C34C3) Rabbit mAb detects endogenous levels of total NEK7 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the carboxy terminus of human NEK7.

Background

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).

Background References

1. Kandli, M. et al. (2000) *Genomics* 68, 187-96.
2. Belham, C. et al. (2003) *J Biol Chem* 278, 34897-909.
3. O'regan, L. et al. (2007) *Cell Div* 2, 25.
4. Shi, H. et al. (2016) *Nat Immunol* 17, 250-8.
5. He, Y. et al. (2016) *Nature* 530, 354-7.
6. Sun, Z. et al. (2020) *Front Physiol* 11, 606996.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: 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.

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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