

**DATASHEET**

**NEK7 Rabbit Polyclonal Antibody**

CAT. NO. APA12058

**KEY FEATURES**

Target	NEK7	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

**BACKGROUND**

Protein kinase which plays an important role in mitotic cell cycle progression . Required for microtubule nucleation activity of the centrosome, robust mitotic spindle formation and cytokinesis . Phosphorylates EML4 at 'Ser-146', promoting its dissociation from microtubules during mitosis which is required for efficient chromosome congression . Phosphorylates RPS6KB1 . Acts as an essential activator of the NLRP3 inflammasome assembly independently of its kinase activity . Acts by unlocking NLRP3 following NLRP3 translocation into the microtubule organizing center (MTOC), relieving NLRP3 autoinhibition and promoting formation of the NLRP3:PYCARD complex, and activation of CASP1 .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

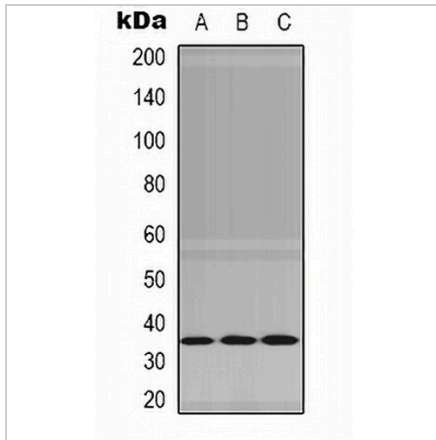
Description	Rabbit polyclonal antibody to NEK7
Specificity	Recognizes endogenous levels of NEK7 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NEK7. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 34 kD; Observed: 35 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Serine/threonine-protein kinase Nek7; Never in mitosis A-related kinase 7; NimA-related protein kinase 7
Gene Symbol	NEK7
Entrez Gene	140609(Human); 59125(Mouse); 360850(Rat)
SwissProt	Q8TDX7(Human); Q9ES74(Mouse); D3ZBE5(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arex.bio](mailto:info@arex.bio) or your local distributor.

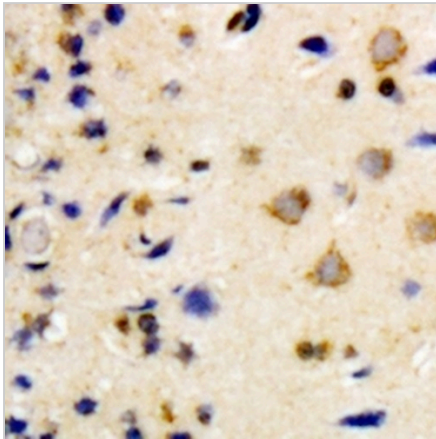
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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**DATA**

Western blot analysis of NEK7 expression in HepG2 (A), Jurkat (B), mouse heart (C) whole cell lysates. (Predicted band size: 34 kD; Observed band size: 35 kD)



Immunohistochemical analysis of NEK7 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.