

For Research Use Only

NEK7 Recombinant monoclonal antibody

Catalog Number: 87253-1-RR



Basic Information

Catalog Number: 87253-1-RR	GenBank Accession Number: NM_133494	Purification Method: Protein A purification
Size: 100ul, Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 140609	CloneNo.: 252501C6
Source: Rabbit	UNIPROT ID: Q8TDX7	Recommended Dilutions: WB: 1:1000-1:4000 IHC: 1:500-1:2000
Isotype: IgG	Full Name: NIMA (never in mitosis gene a)-related kinase 7	FC (Intra): 0.25 ug per 10 ⁶ cells in a 100 µl suspension
Immunogen Catalog Number: AG33629	Calculated MW: 35	
	Observed MW: 32-35 kDa	

Applications

Tested Applications:
WB, IHC, FC (Intra), ELISA

Species Specificity:
human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, Jurkat cells, NIH/3T3 cells, C6 cells, RAW 264.7 cells

IHC: mouse spleen tissue,

FC (Intra): A549 cells,

Background Information

Mammalian NIMA-related kinases (NEKs) represent a family of serine/threonine kinases, named NEK1-NEK11, which are implicated in the control of several aspects of mitosis and are involved in non-mitotic functions (PMID: 33364979). NIMA-related kinase 7 (NEK7) is the smallest NIMA-related kinase (NEK) in mammals. NEK7 is identified as a highly conserved serine or threonine kinase, which is not only crucial for mitosis entry, cell cycle progression, cell division, and mitotic process, but also expressed in brain, heart, lung, liver, spleen, and other tissues (PMID: 31787755).

Storage

Storage:
Store at -20°C. Stable for one year after shipment.

Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

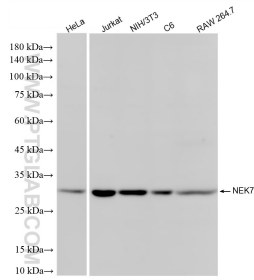
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

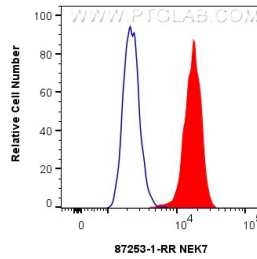
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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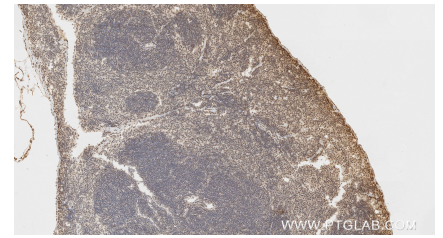
Selected Validation Data



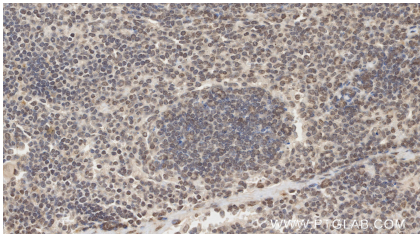
Various lysates were subjected to SDS PAGE followed by western blot with 87253-1-RR (NEK7 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



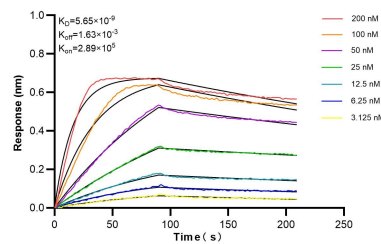
1×10^6 A549 cells were intracellularly stained with 0.25 μ g NEK7 Recombinant monoclonal antibody (87253-1-RR, Clone:252501C6) and CoraLite[®]488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 μ g Isotype Control (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019).



Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 87253-1-RR (NEK7 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 87253-1-RR (NEK7 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 87253-1-RR against Human NEK7 were performed. The affinity constant is 5.65 nM.