10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Nemo Like Kinase Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1616

Specification

KD-Validated Anti-Nemo Like Kinase Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q9UBE8
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 58 kDa ; Observed , 58 kDa KDa**
Gene Name	**NLK**
Aliases	**Nemo Like Kinase; Serine/Threonine-Protein Kinase NLK; Nemo-Like Kinase; EC 2.7.11.24; Protein LAK1; EC 2.7.11; LAK1**
Immunogen	**A synthesized peptide derived from human NLK**

KD-Validated Anti-Nemo Like Kinase Rabbit Monoclonal Antibody - Additional Information

Gene ID **51701**

Other Names
Serine/threonine-protein kinase NLK, 2.7.11.24, Nemo-like kinase, Protein LAK1, NLK, LAK1 {ECO:0000312|EMBL:AAD56013.1}

KD-Validated Anti-Nemo Like Kinase Rabbit Monoclonal Antibody - Protein Information

Name NLK

Synonyms LAK1 {ECO:0000312|EMBL:AAD56013.1}

Function
Serine/threonine-protein kinase that regulates a number of transcription factors with key roles in cell fate determination (PubMed:12482967, PubMed:14960582, PubMed:15004007, PubMed:15764709, PubMed:20061393, PubMed:20874444, PubMed:21454679). Positive effector of the non-canonical Wnt signaling pathway, acting downstream of WNT5A, MAP3K7/TAK1 and HIPK2 (PubMed:15004007, PubMed:15764709). Negative regulator of the canonical Wnt/beta-catenin signaling pathway (PubMed:<a

href="http://www.uniprot.org/citations/12482967" target="_blank">12482967). Binds to and phosphorylates TCF7L2/TCF4 and LEF1, promoting the dissociation of the TCF7L2/LEF1/beta-catenin complex from DNA, as well as the ubiquitination and subsequent proteolysis of LEF1 (PubMed:21454679). Together these effects inhibit the transcriptional activation of canonical Wnt/beta-catenin target genes (PubMed:12482967, PubMed:21454679). Negative regulator of the Notch signaling pathway (PubMed:20118921). Binds to and phosphorylates NOTCH1, thereby preventing the formation of a transcriptionally active ternary complex of NOTCH1, RBPJ/RBPSUH and MAML1 (PubMed:20118921). Negative regulator of the MYB family of transcription factors (PubMed:15082531). Phosphorylation of MYB leads to its subsequent proteolysis while phosphorylation of MYBL1 and MYBL2 inhibits their interaction with the coactivator CREBBP (PubMed:15082531). Other transcription factors may also be inhibited by direct phosphorylation of CREBBP itself (PubMed:15082531). Acts downstream of IL6 and MAP3K7/TAK1 to phosphorylate STAT3, which is in turn required for activation of NLK by MAP3K7/TAK1 (PubMed:15004007, PubMed:15764709). Upon IL1B stimulus, cooperates with ATF5 to activate the transactivation activity of C/EBP subfamily members (PubMed:25512613). Phosphorylates ATF5 but also stabilizes ATF5 protein levels in a kinase-independent manner (PubMed:25512613). Acts as an inhibitor of the mTORC1 complex in response to osmotic stress by mediating phosphorylation of RPTOR, thereby preventing recruitment of the mTORC1 complex to lysosomes (PubMed:26588989).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:O54949}. Cytoplasm {ECO:0000250|UniProtKB:O54949}. Note=Predominantly nuclear. A smaller fraction is cytoplasmic. {ECO:0000250|UniProtKB:O54949}

KD-Validated Anti-Nemo Like Kinase Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Nemo Like Kinase Rabbit Monoclonal Antibody - Images

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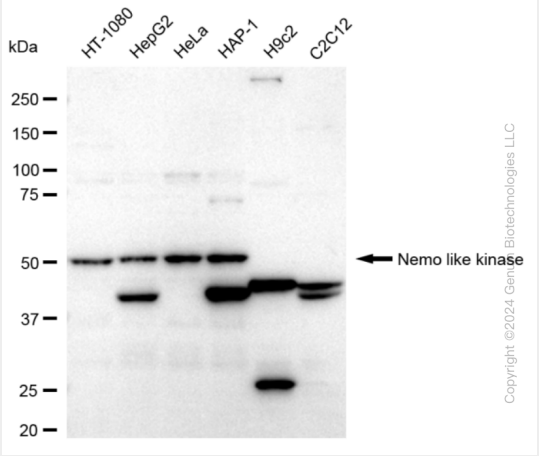
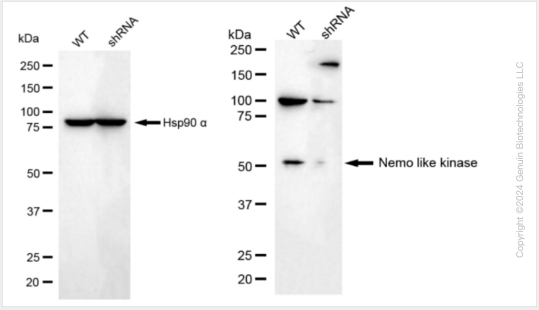
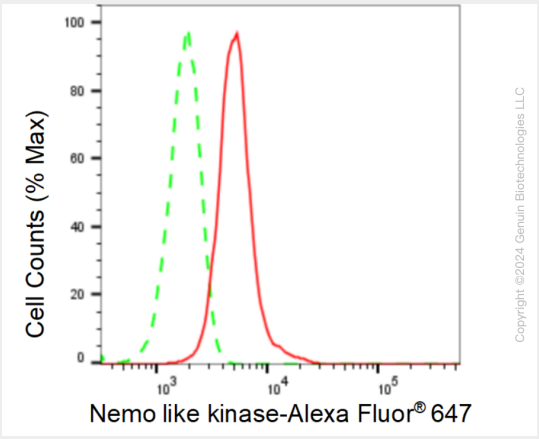


Western blotting analysis using anti-Nemo like kinase antibody (Cat#AGI1616). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Nemo like kinase antibody (Cat#AGI1616, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Nemo like kinase antibody (Cat#AGI1616). Nemo like kinase expression in wild type (WT) and Nemo like kinase shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Nemo like kinase antibody (Cat#AGI1616, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Nemo like kinase expression in HeLa cells using Nemo like kinase antibody (Cat#AGI1616, 1:2,000). Green, isotype control; red, Nemo like kinase.

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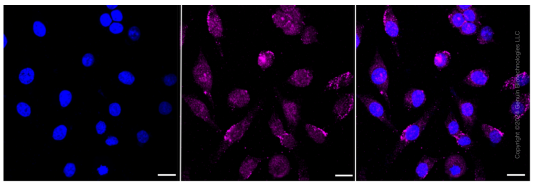

Immunocytochemical staining of HeLa cells with anti-Nemo like kinase antibody (Cat#AGI1616, 1:1,000). Nuclei were stained blue with DAPI; Nemo like kinase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.