

Anti-NLK Rabbit Monoclonal Antibody Catalog # ABO16018

Specification

Anti-NLK Rabbit Monoclonal Antibody - Product Information

Application	WB, FC
Primary Accession	Q9UBE8
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

Description

Anti-NLK Rabbit Monoclonal Antibody . Tested in WB, Flow Cytometry applications. This antibody reacts with Human.

Anti-NLK 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}

Calculated MW

58 kDa KDa

Application Details

WB 1:500-1:2000
FC 1:50

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human NLK

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-NLK 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](http://www.uniprot.org/citations/12482967)), PubMed: [14960582](http://www.uniprot.org/citations/14960582)), PubMed: [15004007](http://www.uniprot.org/citations/15004007)), PubMed: [15764709](http://www.uniprot.org/citations/15764709)), PubMed: [20061393](http://www.uniprot.org/citations/20061393)), PubMed: [20874444](http://www.uniprot.org/citations/20874444)), PubMed: [21454679](http://www.uniprot.org/citations/21454679)). Positive effector of the non-canonical Wnt signaling pathway, acting downstream of WNT5A, MAP3K7/TAK1 and HIPK2 (PubMed: [15004007](http://www.uniprot.org/citations/15004007)), PubMed: [15764709](http://www.uniprot.org/citations/15764709)). Negative regulator of the canonical Wnt/beta-catenin signaling pathway (PubMed: [12482967](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/21454679)). Together these effects inhibit the transcriptional activation of canonical Wnt/beta-catenin target genes (PubMed: [12482967](http://www.uniprot.org/citations/12482967)), PubMed: [21454679](http://www.uniprot.org/citations/21454679)). Negative regulator of the Notch signaling pathway (PubMed: [20118921](http://www.uniprot.org/citations/20118921)). Binds to and phosphorylates NOTCH1, thereby preventing the formation of a transcriptionally active ternary complex of NOTCH1, RBPJ/RBPSUH and MAML1 (PubMed: [20118921](http://www.uniprot.org/citations/20118921)). Negative regulator of the MYB family of transcription factors (PubMed: [15082531](http://www.uniprot.org/citations/15082531)). Phosphorylation of MYB leads to its subsequent proteolysis while phosphorylation of MYBL1 and MYBL2 inhibits their interaction with the coactivator CREBBP (PubMed: [15082531](http://www.uniprot.org/citations/15082531)). Other transcription factors may also be inhibited by direct phosphorylation of CREBBP itself (PubMed: [15082531](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/15004007)), PubMed: [15764709](http://www.uniprot.org/citations/15764709)). Upon IL1B stimulus, cooperates with ATF5 to activate the transactivation activity of C/EBP subfamily members (PubMed: [25512613](http://www.uniprot.org/citations/25512613)). Phosphorylates ATF5 but also stabilizes ATF5 protein levels in a kinase-independent manner (PubMed: [25512613](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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}

Anti-NLK 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 Cytometry](#)
- [Cell Culture](#)

Anti-NLK Rabbit Monoclonal Antibody - Images

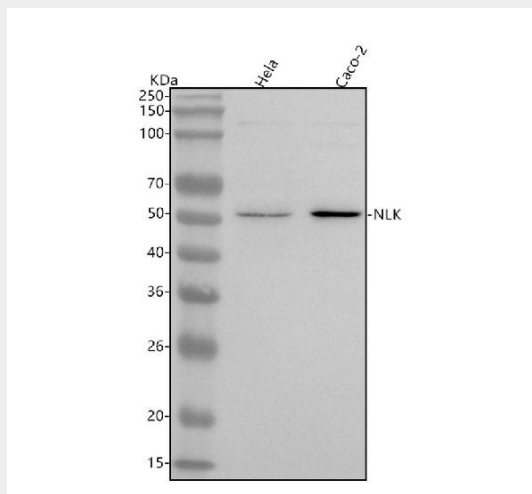


Figure 1. Western blot analysis of NLK using anti-NLK antibody (M02091-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human Caco-2 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NLK antigen affinity purified monoclonal antibody (Catalog # M02091-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NLK at approximately 58 kDa. The expected band size for NLK is at 58 kDa.