

KD-Validated Anti-Nemo Like Kinase Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1616

Product Information

Application	WB, FC, ICC
Primary Accession	Q9UBE8
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB585
Calculated MW	58283
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

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}

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: 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}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.