
Product Name: NLK Mouse Monoclonal Antibody**Catalog #: AMM85948**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB
Reactivity	Human, Mouse, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2a
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in TBS with 0.05% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000
Molecular Weight	58.3kDa

Antigen Information

Gene Name	NLK
Alternative Names	Serine/threonine-protein kinase NLK, Nemo-like kinase, Protein LAK1, NLK, LAK1 {ECO:0000312 EMBL:AAD560131}
Gene ID	51701.0
SwissProt ID	Q9UBE8
Immunogen	Purified His-tagged NLK protein was used to produced this monoclonal antibody.

Background

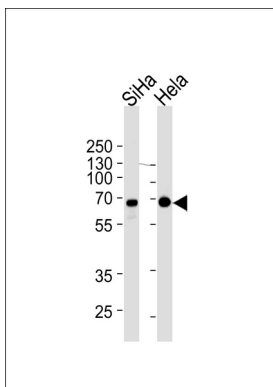
Serine/threonine-protein kinase that regulates a number of transcription factors with key roles in cell fate determination. Positive effector of the non-canonical Wnt signaling pathway, acting downstream of WNT5A, MAP3K7/TAK1 and HIPK2.

Activation of this pathway causes binding to and phosphorylation of the histone methyltransferase SETDB1. The NLK-SETDB1 complex subsequently interacts with PPARG, leading to methylation of PPARG target promoters at histone H3K9 and transcriptional silencing. The resulting loss of PPARG target gene transcription inhibits adipogenesis and promotes osteoblastogenesis in mesenchymal stem cells (MSCs). Negative regulator of the canonical Wnt/beta-catenin signaling pathway. 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. Together these effects inhibit the transcriptional activation of canonical Wnt/beta-catenin target genes. Negative regulator of the Notch signaling pathway. Binds to and phosphorylates NOTCH1, thereby preventing the formation of a transcriptionally active ternary complex of NOTCH1, RBPJ/RBPSUH and MAML1. Negative regulator of the MYB family of transcription factors. Phosphorylation of MYB leads to its subsequent proteolysis while phosphorylation of MYBL1 and MYBL2 inhibits their interaction with the coactivator CREBBP. Other transcription factors may also be inhibited by direct phosphorylation of CREBBP itself. Acts downstream of IL6 and MAP3K7/TAK1 to phosphorylate STAT3, which is in turn required for activation of NLK by MAP3K7/TAK1.

Research Area

Wnt signaling pathway,MAPK signaling pathway

Image Data



NLK Antibody western blot analysis in SiHa,HeLa cell line lysates (35µg/lane).This demonstrates the NLK antibody detected the NLK protein (arrow).