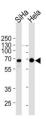


Serine/threonine-Protein Kinase NLK (NLK) Antibody

Catalogue No.:abx034924



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.

Target: Serine/threonine-Protein Kinase NLK (NLK)

Clonality: Monoclonal

Reactivity: Human

Tested Applications: ELISA, WB

Host: Mouse

Recommended dilutions: WB: 1/1000. Optimal dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

Immunogen: Purified His-tagged Human NLK protein

Isotype: IgG_{2a}

Form: Liquid

1 of 2

Datasheet

Version: 2.0.0 Revision date: 18 Mar 2025



Purification: Purified through a protein G column, eluted with high and low pH buffers and neutralized

immediately, followed by dialysis against PBS.

Storage: Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

UniProt Primary AC: Q9UBE8 (UniProt, ExPASy)

NCBI Accession: NP_057315.3

String: <u>9606.ENSP00000384625</u>

Molecular Weight: Calculated MW: 58.3 kDa

Buffer: PBS containing 0.09% sodium azide.

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC,

THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL

CONSUMPTION.