Datasheet for ABIN4912401

anti-Nemo-Like Kinase antibody

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Overview

Quantity:	100 µL
Target:	Nemo-Like Kinase (NLK)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Nemo-Like Kinase antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	Purified His-tagged NLK protein was used to produced this monoclonal antibody.
Clone:	6C1
Isotype:	IgG2a
Cross-Reactivity:	Human
Purification:	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

Target:	Nemo-Like Kinase (NLK)
Alternative Name:	NLK (NLK Products)
Background:	Synonyms: Serine/threonine-protein kinase NLK, Nemo-like kinase, Protein LAK1, NLK, LAK1

Target Details

	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. Upon IL1B stimulus, cooperates with ATF5 to activate the transactivation activity of C/EBP subfamily members. Phosphorylates ATF5 but also stabilizes ATF5 protein levels in a kinase-independent manner (PubMed:25512613).
Gene ID:	51701
UniProt:	Q9UBE8
Pathways:	Ubiquitin Proteasome Pathway

Application Details

Application Notes:	WB 1:300-5000
Restrictions:	For Research Use only

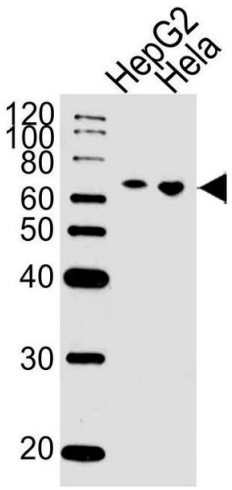
Handling

Format:	Liquid
Concentration:	0.5 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Handling

Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Lane 1: HepG2 Cell lysates, Lane 2: HeLa Cell lysates, probed with NLK (1146CT24.2.1) Monoclonal Antibody, unconjugated (bsm-51414M) at 1:1000 overnight at 4°C followed by a conjugated secondary antibody for 60 minutes at 37°C.