Datasheet for ABIN7317069

Nemo-Like Kinase Protein (NLK) (GST tag,His tag)

1 Image

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Overview

Quantity:	50 µg
Target:	Nemo-Like Kinase (NLK)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Nemo-Like Kinase protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human NLK Protein (His & GST Tag)(Active)
Sequence:	Val121-Glu 527
Characteristics:	A DNA sequence encoding the human NLK (Q9UBE8) (Val121-Glu527) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 91 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	The specific activity was determined to be 3 nmol/min/mg using MBP as substrate.

Target Details

Target:	Nemo-Like Kinase (NLK)
Alternative Name:	NLK (NLK Products)

Target Details

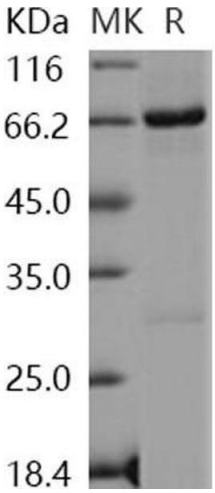
Background:	Background: Nemo-like kinase contains 1 protein kinase domain and belongs to the protein kinase superfamily, CMGC Ser/Thr protein kinase family and MAP kinase subfamily. It also contains a TQE activation loop motif in which autophosphorylation of the threonine residue (Thr-298) is sufficient for kinase activation. As a serine/threonine-protein kinase, nemo-like kinase regulates a number of transcription factors with key roles in cell fate determination. It is a 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). Nemo-like kinase also is a negative regulator of the canonical Wnt/beta-catenin signaling pathway. Synonym: LAK1,NLK
Molecular Weight:	74.1 kDa
UniProt:	Q9UBE8
Pathways:	Ubiquitin Proteasome Pathway

Application Details

Restrictions:	For Research Use only

Handling

Format:	Frozen, Liquid
Buffer:	Supplied as sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 10 % glycerol
Storage:	-20 °C
Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



Western Blotting

Image 1.