磷酸化 Nemo 样激酶抗体

产品货号： mlR10421

英文名称： Phospho-Nemo-like kinase (Thr298)

中文名称： 磷酸化 Nemo 样激酶抗体

别　　名： Nemo-like kinase (Phospho-Thr298); Nemo-like kinase (Phospho-T298); p-Nemo-like kinase (Thr298); p-Nemo-like kinase (T298); DKFZp761G1211; FLJ21033; LAK1; Nemo like kinase; Nemo-like kinase; Nlk; NLK_HUMAN; Protein LAK1; Serine/threonine protein kinase NLK; Serine/threonine-protein kinase NLK.

产品类型： 磷酸化抗体

研究领域： 细胞生物　免疫学　神经生物学　信号转导　干细胞　细胞周期蛋白　激酶和磷酸酶

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Pig, Cow, Rabbit, Sheep,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500（石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 58kDa

细胞定位： 细胞核 细胞浆

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthesised phosphopeptide derived from human Nemo-like kinase around the phosphorylation site of Thr298:HM(p-T)QE

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 ˚C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20˚C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ˚C.

PubMed : PubMed

产品介绍： Nemo-like kinase (NLK) plays a role in cell fate determination and is required for differentiation of bone marrow stromal cells. It acts downstream of MAP3K7 and HIPK2 to negatively regulate the canonical Wnt/beta-catenin signaling pathway and the phosphorylation and destruction of the MYB transcription factor. It may suppress a wide range of transcription factors by phosphorylation of the coactivator, CREBBP. (referenced from swissprot)

Function:

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.

Subunit:

Homodimer. Homodimerization is required for intermolecular autophosphorylation, kinase activation and nuclear localization. May interact with components of cullin-RING-based SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes. Interacts with LEF1, MEF2A, MYBL1 and MYBL2. Interacts with the upstream activating kinases HIPK2 and MAP3K7/TAK1. Interaction with MAP3K7/TAK1 seems to be indirect, and may be mediated by other proteins such as STAT3, TAB1 and TAB2. Interacts with and phosphorylates a number of transcription factors including FOXO1, FOXO3, FOXO4, MYB, NOTCH1 and TCF7L2/TCF4. Interacts with DAPK3/ZIPK, and this interaction may disrupt interaction with transcription factors such as TCF7L2/TCF4. Forms a transcriptional repressor complex with CHD7, PPARG and SETDB1. Interacts with RNF138/NARF.

Subcellular Location:

Nucleus. Cytoplasm. Note=Predominantly nuclear. A smaller fraction is cytoplasmic.

Post-translational modifications:

Phosphorylated on Thr-298. Intermolecular autophosphorylation on Thr-298 activates the enzyme.

Similarity:

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.

Contains 1 protein kinase domain.

SWISS:

Q9UBE8

Gene ID:

51701

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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