

磷酸化 P27 抗体/周期素依赖激酶抑制剂抗体

产品货号: mIR5279

英文名称: phospho-CDKN1B (Thr198)

中文名称: 磷酸化 P27 抗体/周期素依赖激酶抑制剂抗体

别 名: p27 KIP 1 (phospho T198); p-p27 KIP 1 (phospho T198);p27Kip1(Phospho-Thr198); p-p27Kip1(Thr198); p-p27Kip1(198); CDN1B_HUMAN; AA408329; AI843786; Cdki1b; CDKN 1B; CDKN 4; CDKN1B; CDKN1B; CDKN4; CDKN4; Cyclin Dependent Kinase Inhibitor 1B; Cyclin Dependent Kinase Inhibitor 1B; Cyclin Dependent Kinase Inhibitor 1B (p27, Kip1); Cyclin-dependent kinase Inhibitor 1B; Cyclin-dependent kinase Inhibitor p27; Cyclin-dependent kinase Inhibitor p27 Kip1; KIP 1; KIP1; MEN1B; MEN4; OTTHUMP00000195098; OTTHUMP00000195099; p27; p27 Kip1; P27-like cyclin-dependent kinase Inhibitor; P27KIP1.

产品类型: 磷酸化抗体

研究领域: 免疫学 细胞周期蛋白

抗体来源: Rabbit

克隆类型: Polyclonal



交叉反应: Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep, Guinea Pig,

产品应用 : WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 Flow-Cyt=1µg/Test

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: 22kDa

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 CDKN1B/P27kip1 around the phosphorylation site of Thr198:RQ(p-T)

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 background:

This gene encodes a cyclin-dependent kinase inhibitor, which shares a limited similarity with CDK inhibitor

CDKN1A/p21. The encoded protein binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4

complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered

by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the

cellular transition from quiescence to the proliferative state. [provided by RefSeq, Jul 2008]

Function:

Important regulator of cell cycle progression. Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A-CDK2

complexes. Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and

modulation of CCND1-CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4

complexes depending on its phosphorylation state and/or stoichometry.

Subunit:

Forms a ternary compex with CCNE1/CDK2/CDKN1B.

Subcellular Location:

Nucleus. Cytoplasm. Endosome. Note=Nuclear and cytoplasmic in quiescent cells. AKT-or RSK-mediated

phosphorylation on Thr-198, binds 14-3-3, translocates to the cytoplasm and promotes cell cycle progression.

Mitogen-activated UHMK1 phosphorylation on Ser-10 also results in translocation to the cytoplasm and cell cycle

progression. Phosphorylation on Ser-10 facilitates nuclear export. Translocates to the nucleus on



phosphorylation of Tyr-88 and Tyr-89. Colocalizes at the endosome with SNX6; this leads to lysosomal degradation.

Tissue Specificity:

Expressed in all tissues tested. Highest levels in skeletal muscle, lowest in liver and kidney.

Post-translational modifications:

Phosphorylated; phosphorylation occurs on serine, threonine and tyrosine residues. Phosphorylation on Ser-10 is the major site of phosphorylation in resting cells, takes place at the G(0)-G(1) phase and leads to protein stability. Phosphorylation on other sites is greatly enhanced by mitogens, growth factors, cMYC and in certain cancer cell lines. The phosphorylated form found in the cytoplasm is inactivate. Phosphorylation on Thr-198 is required for interaction with 14-3-3 proteins. Phosphorylation on Thr-187, by CDK2 leads to protein ubiquitination and proteasomal degradation. Tyrosine phosphorylation promotes this process. Phosphorylation by PKB/AKT1 can be suppressed by LY294002, an inhibitor of the catalytic subunit of PI3K. Phosphorylation on Tyr-88 and Tyr-89 has no effect on binding CDK2, but is required for binding CDK4. Dephosphorylated on tyrosine residues by G-CSF.

Ubiquitinated; in the cytoplasm by the KPC complex (composed of RNF123/KPC1 and UBAC1/KPC2) and, in the nucleus, by SCF(SKP2). The latter requires prior phosphorylation on Thr-187. Ubiquitinated; by a TRIM21-containing SCF(SKP2)-like complex; leads to its degradation.

DISEASE:

Defects in CDKN1B are the cause of multiple endocrine neoplasia type 4 (MEN4) [MIM:610755]. Multiple endocrine neoplasia (MEN) syndromes are inherited cancer syndromes of the thyroid. MEN4 is a MEN-like syndrome with a phenotypic overlap of both MEN1 and MEN2.

Similarity:

Belongs to the CDI family.

SWISS:



Gene ID:

1027

Important Note:

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

P27 蛋白是一种新发现的周期素依赖激酶抑制剂,属于细胞周期的负性调控因子。P27 基因及其产物的异常表达可能与某些肿瘤的发生、发展有着密切的关系。P27 蛋白对细胞周期的调控及在肿瘤中发挥着很重要的作用。

产品图片

