# abcam

## Product datasheet

## Anti-p27 KIP 1 (phospho T187) antibody ab75908

★★★☆☆ 1 Abreviews 12 References 2 图像

概述

产品名称 Anti-p27 KIP 1 (phospho T187)抗体

描述 兔多克隆抗体to p27 KIP 1 (phospho T187)

**宿主** Rabbit

**适用于:** WB, IHC-P

种属反应性 与反应: Human

免疫原 Synthetic peptide corresponding to Human p27 KIP 1 (phospho T187) conjugated to keyhole

limpet haemocyanin.

Database link: P46527

Run BLAST with
Run BLAST with

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS

PBS without Mg2+ and Ca2+

纯**度** Immunogen affinity purified

纯**化**说明 ab75908 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-

specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

克隆 多克隆

同种型 ΙgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab75908于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	<b>★★★</b> ☆☆ <u>(1)</u>	1/500 - 1/1000. Predicted molecular weight: 22 kDa.
IHC-P		1/50 - 1/100.

靶标

功能 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.

组织特异性 Expressed in all tissues tested. Highest levels in skeletal muscle, lowest in liver and kidney.

疾病相关 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.

序列相似性 Belongs to the CDI family.

A peptide sequence containing only AA 28-79 retains substantial Kip1 cyclin A/CDK2 inhibitory

activity.

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 Pl3K. 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.

Subject to degradation in the lysosome. Interaction with SNX6 promotes lysosomal degradation.

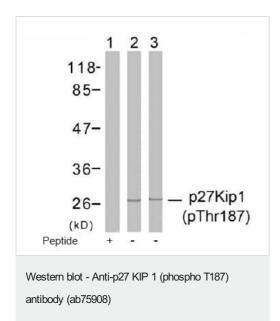
Nucleus. Cytoplasm. Endosome. Nuclear and cytoplasmic in quiescent cells. AKT-or RSKmediated phosphorylation on Thr-198, binds 14-3-3, translocates to the cytoplasm and promotes cell cycle progression. Mitogen-activated UHMK1 phosphorylation on Ser-10 also results in translocation to the cytoplasm and cell cycle progression. Phosphorylation on Ser-10 facilitates

结构域

翻译后修饰

细胞定位

#### 图片



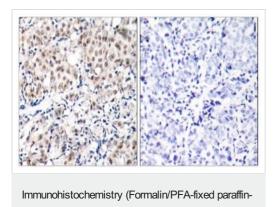
**All lanes :** Anti-p27 KIP 1 (phospho T187) antibody (ab75908) at 1/500 dilution

**Lane 1 :** Extracts from HeLa cells treated with EGF with immunising peptide

Lane 2: Extracts from HeLa cells treated with EGF

Lane 3: Extracts from HeLa cells treated with IFN alpha

**Predicted band size:** 22 kDa **Observed band size:** 27 kDa



embedded sections) - Anti-p27 KIP 1 (phospho

T187) antibody (ab75908)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ab75908 (left) at 1/50 dilution or the same antibody preincubated with blocking peptide (right).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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