

Anti-p27 KIP 1 antibody [EPR18388-138] ab190851

重组 RabMAb

6 References [9 图像](#)

概述

产品名称	Anti-p27 KIP 1抗体[EPR18388-138]
描述	兔单克隆抗体[EPR18388-138] to p27 KIP 1
宿主	Rabbit
经测试应用	适用于: ICC/IF, WB, IHC-P, IP
种属反应性	与反应: Mouse, Rat
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Rat thymus tissue lysate; NIH/3T3, C2C12, Neuro-2a and C6 whole cell lysate. ICC/IF: Neuro-2a and NIH/3T3 cells. IHC-P: Mouse kidney, mouse testis, rat testis and rat cerebral cortex tissue. IP: C2C12 whole cell lysate.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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 long term. Avoid freeze / thaw cycle.
存储溶液	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR18388-138

同种型

IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab190851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
ICC/IF		1/100.
WB		1/1000. Detects a band of approximately 18, 27 kDa (predicted molecular weight: 22 kDa).
IHC-P		1/40000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.

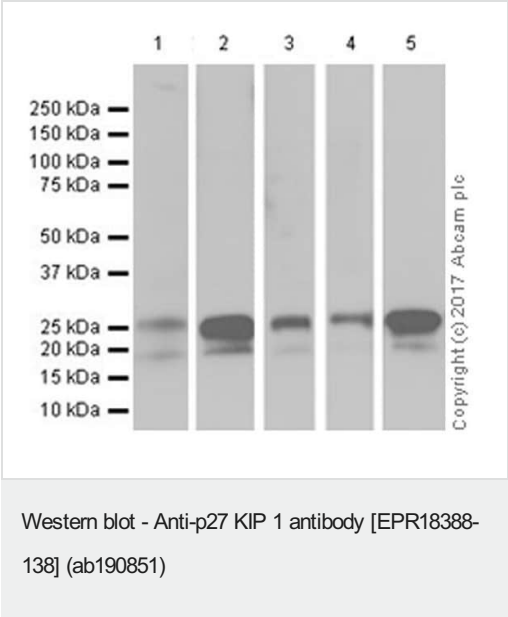
靶标

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 stoichiometry.
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.
结构域	A peptide sequence containing only AA 28-79 retains substantial Kip1 cyclin A/CDK2 inhibitory activity.
翻译后修饰	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. Subject to degradation in the lysosome. Interaction with SNX6 promotes lysosomal degradation.

细胞定位

Nucleus. Cytoplasm. Endosome. 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 and this leads to lysosomal degradation.

图片



All lanes : Anti-p27 KIP 1 antibody [EPR18388-138] (ab190851) at 1/1000 dilution

- Lane 1 :** Rat thymus tissue lysate
- Lane 2 :** NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate
- Lane 3 :** C2C12 (mouse myoblast cell line) whole cell lysate
- Lane 4 :** Neuro-2a (mouse neuroblastoma cell line) whole cell lysate
- Lane 5 :** C6 (rat glial tumor cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Developed using the ECL technique.

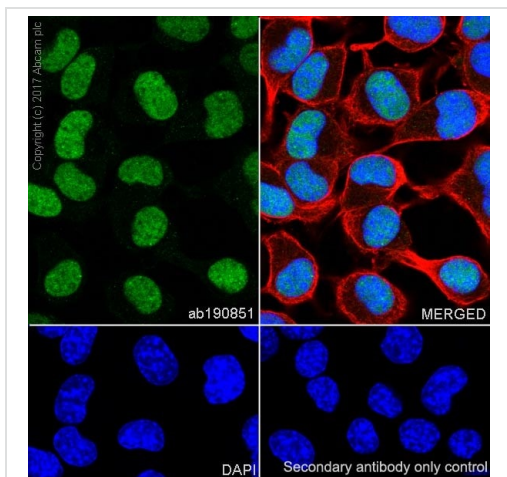
Performed under reducing conditions.

Predicted band size: 22 kDa
Observed band size: 18, 27 kDa

Blocking/Dilution: 5% NFDM/TBST.

Exposure: Lanes 1 and 3: 30 seconds; Lanes 2 and 5: 10 seconds; Lane 4: 15 seconds.

The molecular mass observed is consistent with the literature (PMID: 9033255; PMID: 9679152). The lower band observed in some samples could be a degradation product (PMID: 9190912; 24229711).

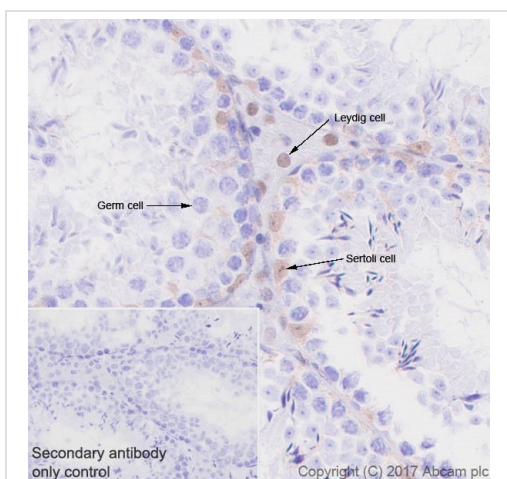


Immunocytochemistry/ Immunofluorescence - Anti-p27 KIP 1 antibody [EPR18388-138] (ab190851)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Neuro-2a (mouse neuroblastoma cell line) cells labeling p27 KIP 1 with ab190851 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green). Confocal image showing mainly nuclear staining in the Neuro-2a cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) ([ab195889](#)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) at 1/1000 dilution.

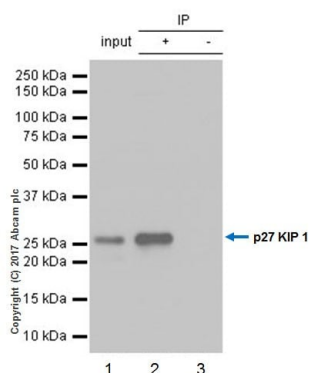


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p27 KIP 1 antibody [EPR18388-138] (ab190851)

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling p27 KIP 1 with ab190851 at 1/40000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), ready to use. Nuclear staining on Leydig cells and Sertoli cells of mouse testis is observed (PMID: 10098522). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), ready to use.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Immunoprecipitation - Anti-p27 KIP 1 antibody
[EPR18388-138] (ab190851)

p27 KIP 1 was immunoprecipitated from 0.35 mg of C2C12 (mouse myoblast cell line) whole cell lysate with ab190851 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab190851 at 1/1000 dilution. VeriBlot for IP Detection Reagents (HRP) ([ab131366](#)), was used for detection at 1/10000 dilution.

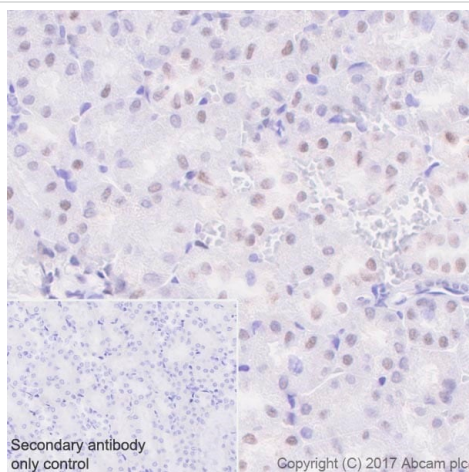
Lane 1: C2C12 whole cell lysate 10 µg (Input).

Lane 2: ab190851 IP in C2C12 whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab190851 in C2C12 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 10 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p27 KIP 1 antibody
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Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling p27 KIP 1 with ab190851 at 1/40000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), ready to use. Nuclear staining on mouse kidney is observed (PMID: 26823281). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), ready to use.

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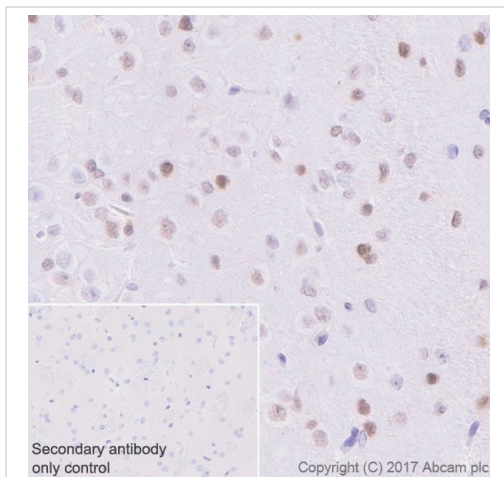


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p27 KIP 1 antibody [EPR18388-138] (ab190851)

Immunohistochemical analysis of paraffin-embedded rat testis tissue labeling p27 KIP 1 with ab190851 at 1/40000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), ready to use. Nuclear staining on Sertoli cells and Leydig cells of rat testis is observed (PMID: 10098522). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), ready to use.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

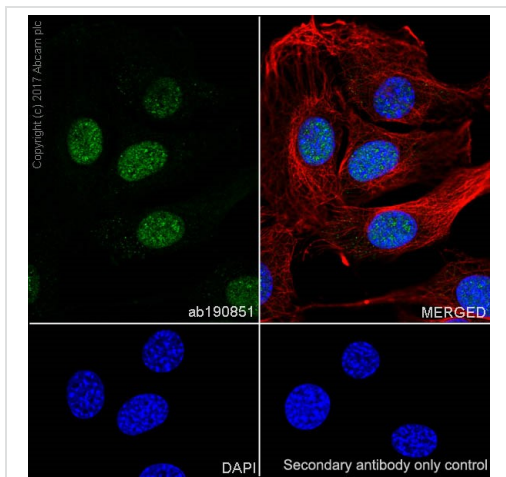


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-p27 KIP 1 antibody [EPR18388-138] (ab190851)

Immunohistochemical analysis of paraffin-embedded rat cerebral cortex tissue labeling p27 KIP 1 with ab190851 at 1/40000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), ready to use. Nuclear staining in the rat cerebral cortex is observed (PMID: 19852587). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), ready to use.

Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).







Immunocytochemistry/ Immunofluorescence - Anti-p27 KIP 1 antibody [EPR18388-138] (ab190851)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (mouse embryo fibroblast cell line) cells labeling p27 KIP 1 with ab190851 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing mainly nuclear staining in the NIH/3T3 cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

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