abcam

Product datasheet

Anti-p27 KIP 1 antibody [EPFHCR16a] - BSA and Azide free ab247947



リコンピナント

RabMAb

画像数3

製品の概要

特記事項

製品名 Anti-p27 KIP 1 antibody [EPFHCR16a] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPFHCR16a] to p27 KIP 1 - BSA and Azide free

由来種 Rabbit

アプリケーション **適用あり**: WB

適用なし: Flow Cyt,ICC/IF,IHC-P or IP

種交差性 交差種: Human

免疫原 Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.

ab247947 is the carrier-free version of ab113075.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

1

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPFHCR16a

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab247947の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Detects a band of approximately 27 kDa (predicted molecular weight: 22 kDa).

追加情報

Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

ターゲット情報

機能

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.

組織特異性

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

関連疾患

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.

配列類似性

Belongs to the CDI family.

ドメイン

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

activity.

翻訳後修飾

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.

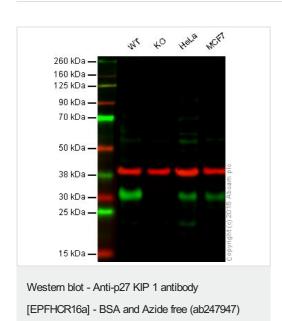
Ubiquitinated; in the cytoplasm by the KPC complex (composed of RNF123/KPC1 and UBAC1/KPC2) and, in the nucleus, by SCF(SKP2). The latter requires prior phosphorylation on Thr-187. Ubiquitinated; by a TRIM21-containing SCF(SKP2)-like complex; leads to its degradation.

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

Nucleus. Cytoplasm. Endosome. Nuclear and cytoplasmic in quiescent cells. AKT-or 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.

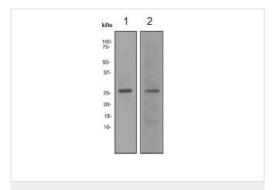
細胞内局在

画像



This data was developed using **ab113075**, the same antibody clone in a different buffer formulation.

<u>ab113075</u> was shown to specifically react with p27 KIP1 in wild-type HAP1 cells. No band was observed when knock out samples were examined.



Western blot - Anti-p27 KIP 1 antibody

[EPFHCR16a] - BSA and Azide free (ab247947)

All lanes : Anti-p27 KIP 1 antibody [EPFHCR16a] (<u>ab113075</u>) at 1/1000 dilution

Lane 1: MCF-7 cell lysates

Lane 2: SH-SY5Y cell lysates

Lysates/proteins at 10 µg per lane.

Predicted band size: 22 kDa

This data was developed using <u>ab113075</u>, the same antibody clone in a different buffer formulation.



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