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Mouse p27Kip1 Blocking Peptide (C-term T197)

Synthetic peptide
Catalog # BP20325b

Specification

Mouse p27Kip1 Blocking Peptide (C-term T197) - Product Information

Primary Accession P46414

Mouse p27Kip1 Blocking Peptide (C-term T197) - Additional Information

Gene ID 12576

Other Names
Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, Cdkn1b

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse p27Kip1 Blocking Peptide (C-term T197) - Protein Information

Name Cdkn1b

Function
Important regulator of cell cycle progression (PubMed:8033213, PubMed:12972555). Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (By similarity). Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A-CDK2 complexes (PubMed:8033213). 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.

Cellular Location
Nucleus. Cytoplasm. Endosome. Note=Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-197, 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 (By similarity) Colocalizes at the endosome with SNX6; this leads to lysosomal degradation (PubMed:20228253). {ECO:0000250, ECO:0000269|PubMed:20228253}

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Mouse p27Kip1 Blocking Peptide (C-term T197) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

Mouse p27Kip1 Blocking Peptide (C-term T197) - Images

Mouse p27Kip1 Blocking Peptide (C-term T197) - Background

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 cyclin D-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.