

## CDKN1B-Y88 Blocking Peptide

Synthetic peptide

Catalog # BP20721b

### Specification

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#### CDKN1B-Y88 Blocking Peptide - Product Information

Primary Accession

[P46527](#)

Other Accession

[Q60439](#)

#### CDKN1B-Y88 Blocking Peptide - Additional Information

Gene ID 1027

##### Other Names

Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, CDKN1B, KIP1

##### Target/Specificity

The synthetic peptide sequence is selected from aa 81-93 of HUMAN 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.

#### CDKN1B-Y88 Blocking Peptide - Protein Information

Name CDKN1B {ECO:0000303|PubMed:20824794}

##### Function

Important regulator of cell cycle progression. Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (PubMed:<a href="http://www.uniprot.org/citations/28666995" target="\_blank">28666995</a>). 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.

##### Cellular 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 (By similarity)

**Tissue Location**

Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

**CDKN1B-Y88 Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**CDKN1B-Y88 Blocking Peptide - Images****CDKN1B-Y88 Blocking Peptide - Background**

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**CDKN1B-Y88 Blocking Peptide - References**

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Pietenpol J.A., et al. Cancer Res. 55:1206-1210(1995).  
Kalnina N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.  
Montagnoli A., et al. Genes Dev. 13:1181-1189(1999).  
Ishida N., et al. J. Biol. Chem. 275:25146-25154(2000).