

Mouse p21Cip1 Blocking Peptide (C-term S148)
Synthetic peptide
Catalog # BP20419b**Specification**

Mouse p21Cip1 Blocking Peptide (C-term S148) - Product InformationPrimary Accession [P39689](#)**Mouse p21Cip1 Blocking Peptide (C-term S148) - Additional Information****Gene ID** 12575**Other Names**

Cyclin-dependent kinase inhibitor 1, CDK-interacting protein 1, Melanoma differentiation-associated protein, p21, Cdkn1a, Cip1, Waf1

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 p21Cip1 Blocking Peptide (C-term S148) - Protein Information**Name** Cdkn1a**Synonyms** Cip1, Waf1**Function**

May be involved in p53/TP53 mediated inhibition of cellular proliferation in response to DNA damage. Binds to and inhibits cyclin- dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression. Functions in the nuclear localization and assembly of cyclin D-CDK4 complex and promotes its kinase activity towards RB1. At higher stoichiometric ratios, inhibits the kinase activity of the cyclin D- CDK4 complex (PubMed:25329316). Inhibits DNA synthesis by DNA polymerase delta by competing with POLD3 for PCNA binding (By similarity). Plays an important role in controlling cell cycle progression and DNA damage-induced G2 arrest (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P38936}. Nucleus

Mouse p21Cip1 Blocking Peptide (C-term S148) - Protocols

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

- [Blocking Peptides](#)

Mouse p21Cip1 Blocking Peptide (C-term S148) - Images

Mouse p21Cip1 Blocking Peptide (C-term S148) - Background

May be the important intermediate by which p53/TP53 mediates its role as an inhibitor of cellular proliferation in response to DNA damage. Binds to and inhibits cyclin-dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression. Functions in the nuclear localization and assembly of cyclin D-CDK4 complex and promotes its kinase activity towards RB1. At higher stoichiometric ratios, inhibits the kinase activity of the cyclin D-CDK4 complex (By similarity).