10320 Camino Santa Fe, Suite G
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Mouse CCND2 Blocking Peptide (C-term T279/T280)

Synthetic peptide
Catalog # BP20417b

Specification

Mouse CCND2 Blocking Peptide (C-term T279/T280) - Product Information

Primary Accession	P30280
Other Accession	Q04827

Mouse CCND2 Blocking Peptide (C-term T279/T280) - Additional Information

Gene ID 12444

Other Names
G1/S-specific cyclin-D2, Ccnd2, Cyl-2

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 CCND2 Blocking Peptide (C-term T279/T280) - Protein Information

Name Ccnd2 {ECO:0000312|MGI:MGI:88314}

Function
Regulatory component of the cyclin D2-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals.

Cellular Location
Nucleus {ECO:0000250|UniProtKB:P30279}. Cytoplasm {ECO:0000250|UniProtKB:P30279}. Nucleus membrane {ECO:0000250|UniProtKB:P30279}. Note=Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated into the nucleus through interaction with KIP/CIP family members {ECO:0000250|UniProtKB:P30279}

Mouse CCND2 Blocking Peptide (C-term T279/T280) - Protocols

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

- Blocking Peptides

Mouse CCND2 Blocking Peptide (C-term T279/T280) - Images

Mouse CCND2 Blocking Peptide (C-term T279/T280) - Background

Regulatory component of the cyclin D2-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D2/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity).