

P27 Kip1 (1A7) Mouse Monoclonal Antibody

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Catalog # AP93409

Product Information

Application	WB, IHC
Primary Accession	P45627
Reactivity	Rat, Human, Mouse
Host	Monoclonal, Mouse
Clonality	Monoclonal
Calculated MW	50134

Additional Information

Other Names	Glutamine synthetase, GS, 6.3.1.2, glnA {ECO:0000303 PubMed:1359838}
Dilution	WB~~1:1000 IHC~~1:100~500
Storage Conditions	-20°C

Protein Information

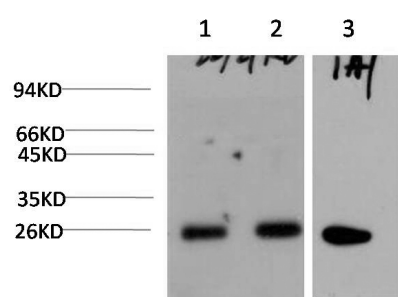
Name	glnA {ECO:0000303 PubMed:1359838}
Function	Glutamine synthetase (GS) is an unusual multitasking protein that functions as an enzyme, a transcription coregulator, and a chaperone in ammonium assimilation and in the regulation of genes involved in nitrogen metabolism. It catalyzes the ATP-dependent biosynthesis of glutamine from glutamate and ammonia. Feedback- inhibited GlnA also interacts with and regulates the activity of the transcriptional regulator TnrA. During nitrogen limitation, TnrA is in its DNA-binding active state and turns on the transcription of genes required for nitrogen assimilation. Under conditions of nitrogen excess, feedback-inhibited GlnA forms a stable complex with TnrA, which inhibits its DNA-binding activity. In contrast, feedback-inhibited GlnA acts as a chaperone to stabilize the DNA-binding activity of GlnR, which represses the transcription of nitrogen assimilation genes.
Cellular Location	Cytoplasm {ECO:0000250 UniProtKB:P12425}.

Background

Cyclin dependent kinase inhibitor 1B(CDKN1B) Homo sapiens This gene encodes a cyclin-dependent kinase inhibitor, which shares a limited similarity with CDK inhibitor CDKN1A/p21. The encoded protein binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation

and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state.

Images



Western blot analysis of 1)MCF7 Cell, 2) HepG2 Cell, 3) C2C12 Cell Lysate using p27 Kpi1Mouse Monoclonal mAb diluted at 1:2,000.

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