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Anti-p27 kip1 pS140 (RABBIT) Antibody

p27 kip1 phospho S140 Antibody
Catalog # ASR5751

Specification

Anti-p27 kip1 pS140 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, IHC, E, IP, I, LCI**
Application Note	**Anti-p27kip1 pS140 antibody is tested for use in ELISA, immunoprecipitation, co-immunoprecipitation, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~27 kDa in size corresponding to p27 by western blotting in the appropriate cell lysate or extract. Anti-p27 is suitable for the detection by immunoblot of human p27. Optimal titers for other applications should be determined by the researcher.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Anti-p27 kip1 pS140 was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to S140 residue of human p27 kip1 protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-p27 kip1 pS140 (RABBIT) Antibody - Additional Information

Gene ID 1027

Other Names
1027

Purity
Anti-p27 kip1 pS140 is directed against the phosphorylated form of human p27 kip1 protein at the S140 residue. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross adsorbed against the non-phosphorylated form of the immunizing peptide. This antibody will specifically react with a p27kip1 protein from human tissue. Reactivity against p27 from other species is unknown.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-p27 kip1 pS140 (RABBIT) Antibody - 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:28666995). 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 stoichometry.

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).

Anti-p27 kip1 pS140 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-p27 kip1 pS140 (RABBIT) Antibody - Images

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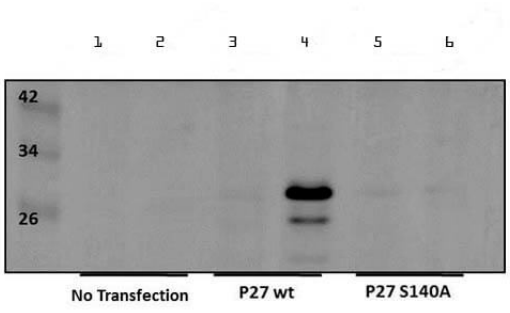

Western Blot of Rabbit anti-p27kip1pS140 Antibody. Lane 1: 293 cells untransfected. Lane 2: 293 cells untransfected and treated. Lane 3: 293 cells transfected with HA-p27wt. Lane 4: 293 cells transfected with HA-p27wt and treated. Lane 5: 293 cells transfected with HA-p27S140A. Lane 6: 293 cells transfected with HA-p27S140A and treated. Load: 20 µg per lane. Primary antibody: p27kip1pS140 antibody at 1:250 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO/TTBS overnight at 4°C. Predicted/Observed size: 27 kDa for p27kip1.

Anti-p27 kip1 pS140 (RABBIT) Antibody - Background

p27 kip1 pS140 is a cyclin-dependent kinase inhibitor that shares a limited similarity with CDK inhibitor CDKN1A/p21. p27 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. Phosphorylation occurs on serine, threonine and tyrosine residues. Anti-p27 kip1 pS140 antibody is ideal for researchers interested in cell cycle and cancer research.