

Datasheet for 600-401-K08S**p27 kip1 phospho S140 Antibody****Overview**

Description:	Anti-p27 kip1 pS140 (RABBIT) Antibody - 600-401-K08S
Item No.:	600-401-K08S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

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.
Synonyms:	rabbit anti-p27 kip1 pS140 antibody, Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, Kip-1, KIP1, CDKN1B
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CDKN1B
Reactivity:	Human
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-p27 kip1 pS140 was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phospho-peptide corresponding to S140 residue of human p27 kip1 protein.
Purity/Specificity:	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.
Relevant Links:	• UniProtKB - P46527 • NCBI - 4757962 • GenelD - 1027

Application Details

Tested Applications:	ELISA, WB
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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:40,000
IHC:	User Optimized
IP:	User Optimized
WB:	1:500 - 1:4,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.68 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer: None

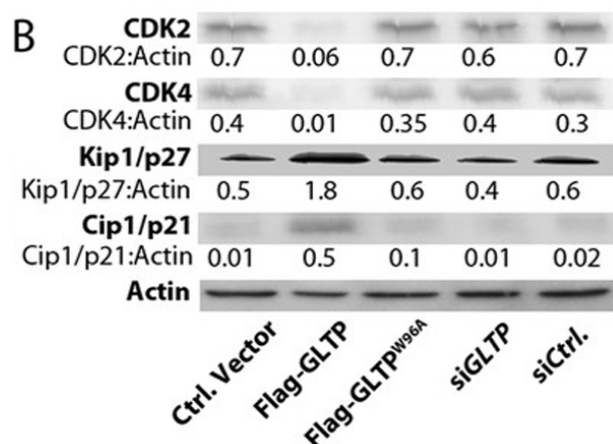
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

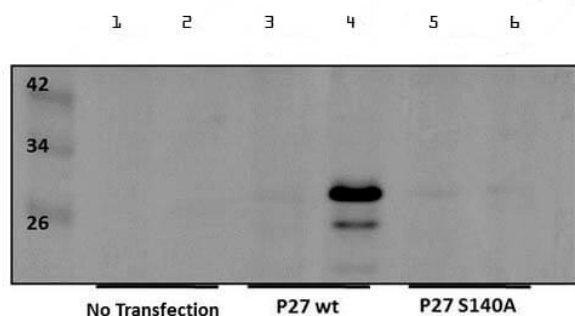
Expiration: Expiration date is one (1) year from date of receipt.

Images



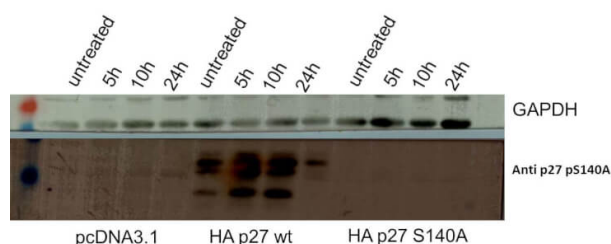
Western Blot

(B) Increased levels of Kip1/p27 and Cip1/p21 and decreased levels of cyclin-dependent kinases (CDK), CDK2 and CDK4 induced by wtGLTP overexpression. Quantitative insights are provided by ratiometric comparisons of band intensities to Actin (loading ctrl.). Fig 3. PMID: 30472325



Western Blot

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.



Western Blot

Western Blot of Rabbit anti-p27kip1pS140 antibody. Lane 1-4: 293 pcDNA3.1. Lane 5-8: 293 HA-p27wt. Lane 9-12: 293 HA-p27S140A. Treatment: untreated, 10µM Etoposide at 5h, 10h, or 24h. 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 p27kip1pS140.

References

- Mishra, SK et al. Upregulation of human glycolipid transfer protein (GLTP) induces necroptosis in colon carcinoma cells. *Biochimica Et Biophysica Acta. Molecular and Cell Biology of Lipids* (2019)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.