

Datasheet for 600-401-GW2S**p53 K305 Ac Antibody****Overview**

Description:	Anti-p53 (ac Lys305) (RABBIT) Antibody - 600-401-GW2S
Item No.:	600-401-GW2S
Size:	25 µL
Applications:	Dot Blot, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background: TP53 (tumor suppressor gene p53) is one of the most well-studied genes that suppresses tumor formation and renders protection against DNA damage by inducing cell cycle arrest, DNA repair, or apoptosis. TP53 signaling is triggered through numerous cellular events ranging from DNA damage to hypoxia, stress and a plethora of other causes. Upon activation, p53 acts as zinc-containing transcriptional regulator and initiates a cascade of events that determines the cellular outcome including cell cycle arrest, apoptosis, senescence, DNA repair, development, differentiation and tissue homeostasis. Cell cycle arrest is induced by p53 via trans-activating genes such as p21 (CDK-inhibitor 1, cyclin dependent kinase) and others. Interestingly, p53 itself is capable of triggering cellular responses (survival or induced cell death) as well. Mutations or deletions in the TP53 gene are present in nearly 50% of human cancers, and primarily results in impaired tumor suppressor function. Anti-p53 (ac Lys305) antibody is ideal for researchers interested in developmental biology, cell growth and cancer research.

Synonyms:	rabbit anti-p53 Ac-Lys305 antibody, rabbit anti-p53 K305ac antibody, cellular tumor antigen p53, tumor suppressor p53, phosphoprotein p53, Antigen NY-CO-13, TP53
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TP53
Reactivity:	Human

PTM Specificity:	Acetylation
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-p53 K305 Ac antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysine 305 of human p53.
Purity/Specificity:	Anti-p53 K305 Ac antibody is directed against human p53 protein. p53 K305 Ac Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis used to suggest reactivity with this protein from human based on 100% homology for the immunizing sequence.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P04637• NCBI - NP_000537.3• GeneID - 7157

Application Details

Tested Applications:	Dot Blot, WB
Application Note:	p53 K305 Ac Antibody has been tested by dot blot and western blotting and is suitable for ELISA. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~43.6 kDa in size corresponding to p53 by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000-1:10000
WB:	1.0 ug/ml

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 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

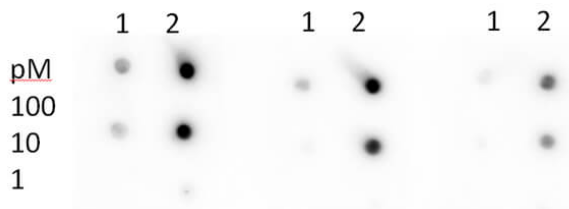
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

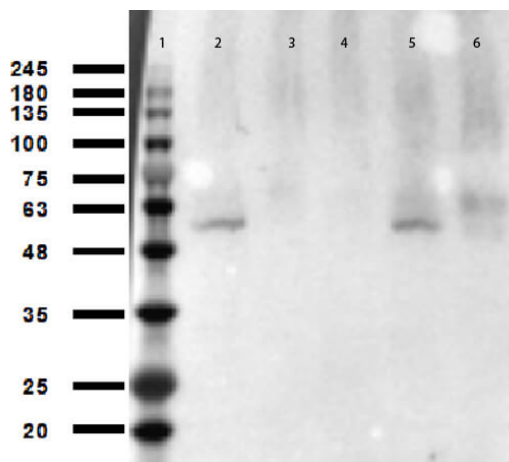
Expiration: Expiration date is one (1) year from date of receipt.

Images



Dot Blot

Dot Blot of Rabbit Anti-p53 305KAc Antibody. Lane 1: Unmodified p53 peptide. Lane 2: 305KAc p53 peptide. Loaded: 100, 10, 1 picomoles of peptide. Primary Antibody: Left Membrane: 1.0 µg/ml of purified antibody; Middle Membrane: 0.5 µg/ml; Right Membrane: 0.25 µg/ml. Blocking: BLOTTO Blocking Buffer (p/n B501-0500) for 30min at RT. Secondary Antibody: Gt-A-Rb IgG HRP (p/n 611-103-122) at 1:40,000.



Western Blot

Western Blot of RABBIT Anti-p53 (ac Lys305) Antibody. Lane 1: Ladder Opal PreStained (p/n MB-210-0500). Lane 2: MCF-7 (p/n W09-000-360). Lane 3: MCF-7 Nuclear Extract (p/n W09-001-A85). Lane 4: Jurkat Lysate (p/n W09-001-370). Lane 5: HeLa Whole Cell Lysate (p/n W09-000-364). Lane 6: A431 Whole Cell Lysate (p/n W09-000-361). Loaded at 10ug. Blocking: BlockOut Buffer (p/n MB-073) for 30 min at RT. Primary Antibody: Rb anti-p53 K305 Ac at 1ug/mL for 4°C overnight. Secondary Antibody: Gt-a-Rb HRP (p/n 611-103-122) at 1:70,000 in MB-073 for 30 min at RT. Expected: ~53 kDa.

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.