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Datasheet for 600-401-C52

HICE1 phosphoS70 Antibody

Overview

Description:	Anti-Hice1 pS70 (RABBIT) Antibody - 600-401-C52
Item No.:	600-401-C52
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Hice1 pS70 is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Hice1 contributes to the mitotic spindle assembly, maintenance of centrosome integrity and completion of cytokinesis as part of the HAUS augmin-like complex. Normal bipolar spindle formation is critical for accurate chromosome segregation and proper mitotic progression. Failure in this event leads to spindle checkpoint activation and chromosome missegregation that ultimately leads to aneuploidy. Hice1 binds to microtubules directly, and promotes spindle integrity and chromosome stability. Hice1 has also shown to play an important role in targeting the gamma TuRC complex to the mitotic spindle, a step that appears to be required for spindle-mediated microtubule generation and normal chromosome segregation. The HAUS augmin-like complex's interaction with microtubules is strong during mitosis, while it is weak or absent during interphase. During interphase, it is primarily cytoplasmic, associating with centrosomes and with the mitotic spindles, preferentially at the spindle pole vicinity. During anaphase and telophase, it additionally associates with the spindle midzone and midbody, respectively. Further characterization of the function of Hice1 will likely be important for better understanding the mechanism of normal mitotic progression and high fidelity chromosome segregation.
Synonyms:	rabbit anti-HICE1 pS70 antibody, HICE-1, HICE 1, HAUS8, HAUS-8, HAUS 8, HAUS augmin-like complex subunit 8, HEC1/NDC80-interacting centrosome-associated protein 1, Sarcoma antigen NY-SAR-48
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	HAUS8
Reactivity:	Human
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Hice1 pS70 Antibody was prepared by repeated immunizations with a phosphorylated synthetic peptide corresponding to the region of amino acids containing serine 70 of Hice1.
Purity/Specificity:	Hice1 pS70 affinity purified antibody is directed against the phosphorylated form of human Hice1 protein at the S70 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. The antibody is specific for the phosphorylated form of Hice1. Reactivity with non-phosphorylated human Hice1 is minimal by ELISA and western blot. A BLAST analysis was used to suggest cross reactivity with Hice1 from human based on 100% sequence homology with the immunogen. Reactivity against homologues from other sources is not known.
Relevant Links:	• UniProtKB - Q9BT25 • NCBI - NP_219485.1 • GeneID - 93323

Application Details

Tested Applications:	ELISA, WB
Application Note:	Hice1 pS70 antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 44.9 kDa in size corresponding to human phosphorylated Hice1 protein by western blotting in the appropriate stimulated tissue or cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:17,000-1:45,000
WB:	1.22 µg/mL

Formulation

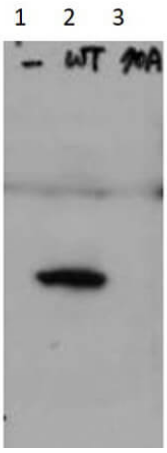
Physical State:	Liquid (sterile filtered)

Concentration:	1.22 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

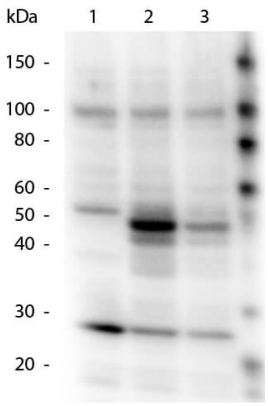
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C 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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western Blot of Rabbit Anti-Hice1 pS70 antibody. Lane 1: HeLa cell extracts of untransfected cells (-). Lane 2: transfected HeLa cell extracts with Flag X3-Hice1 WT (WT). Lane 3: transfected HeLa cell extracts with Flag X3-Hice1 S70A mutant (70A). Load: 35µg per lane. Primary antibody: Hice1 pS70 antibody at 0.5µg/mL for overnight at 4°C. Secondary antibody: IRDye800™ Conjugated Goat Anti-Rabbit IgG secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 44.8 kDa, 48 kDa for Hice1 pS70.



Western Blot

Western Blot of Rabbit anti-HICE1 pS70 antibody. Lane 1: 293T Null. Lane 2: 293T WT Hice1. Lane 3: 293T S70A Hice1. Load: 14 µl per lane. Primary antibody: HICE1 pS70 antibody at 0.75 ug/mL overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 48 kDa, 48 kDa for HICE1 pS70. Other band(s): HICE1 pS70 splice variants and isoforms.

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