

Anti-HICE1 (Rabbit) Antibody

HICE1 Antibody Catalog # ASR3877

Specification

Anti-HICE1 (Rabbit) Antibody - Product Information

Host Rabbit

Conjugate
Target Species
Reactivity
Clonality
Application

Unconjugated
Human
Human
Polyclonal
WB, E, I, LCI

Application Note This antiserum has been tested for use in

ELISA and western blotting using a full length recombinant Hice1 protein. Specific conditions for reactivity and detection of Hice1 should be optimized by the end user. Expect a band approximately ~45 kDa in size corresponding to Hice1 by Western Blotting in the appropriate cell lysate or

extract.

Physical State Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen Anti-HICE1 was prepared from whole rabbit

serum produced by repeated

immunizations with a recombinant full

length Hice1 protein.

Preservative 0.01% (w/v) Sodium Azide

Anti-HICE1 (Rabbit) Antibody - Additional Information

Gene ID 93323

Other Names 93323

Purity

This product was adsorbed against GST from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with endogenous Hice1 protein. A BLAST analysis was used to suggest reactivity with Hice1 from human based on a 100% homology with the immunizing sequence. Expect reactivity with Hice1 from chimpanzee, Sumatran orangutan based on a 90% homology with the immunizing sequence. Cross-reactivity with Hice1 from other sources has not been determined.

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-HICE1 (Rabbit) Antibody - Protein Information

Name HAUS8

Synonyms HICE1

Function

Contributes to mitotic spindle assembly, maintenance of centrosome integrity and completion of cytokinesis as part of the HAUS augmin-like complex.

Cellular Location

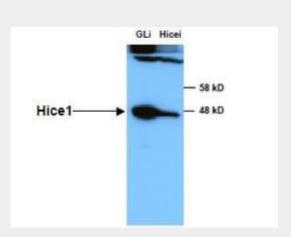
Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Note=During interphase, primarily cytoplasmic and associates with centrosomes and with the mitotic spindles, preferentially at the spindle pole vicinity. During anaphase and telophase, additionally associates with the spindle midzone and midbody, respectively. Localizes to mitotic spindle microtubules

Anti-HICE1 (Rabbit) Antibody - Protocols

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

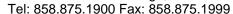
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-HICE1 (Rabbit) Antibody - Images



Anti-HICE1 in Western Blot using Rockland Immunochemicals' Anti-HICE1 Antibody shows detection of a 45 kDa band corresponding to endogenous HICE1 in lysates of S phase HeLa cells silenced for either control Luciferase or HICE1. In right lane (HICE1i): lysates from sh-HICE1 RNAi-treated lentivirus-infected cells. In left lane (GLi): lysates from sh-Luciferase







lentivirus-infected cells as control. Anti-HICE1 Antibody was used at 1:10,000. Molecular weight estimation was made by comparison by prestained MW markers. ECL was used for detection. Personal communication, Kyung S. Lee, NCI, Bethesda, MD.

Anti-HICE1 (Rabbit) Antibody - Background

This antibody 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.