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# Anti-HICE1 Secondary Antibody

Rabbit Polyclonal, Unconjugated
Catalog # ASR1138

## Product Information

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| **Description** | Anti-HICE1 (Rabbit) Antibody |
| **Host** | Rabbit |
| **Conjugate** | Unconjugated |
| **Target Species** | Human |
| **Reactivity** | Human |
| **Clonality** | Polyclonal |
| **Application** | WB |
| **Physical State** | Liquid (sterile filtered) |
| **Host Isotype** | Antiserum |
| **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. |
| **Stabilizer** | None |
| **Preservative** | 0.01% (w/v) Sodium Azide |

## Additional Information

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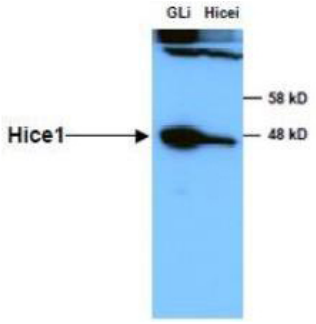
| **Shipping Condition** | Dry Ice |
| **Application Note** | This antiserum has been tested for use in ELISA and western blotting using a full length recombinant Hice1 protein. Specific conditions for reactivity and detection of Hice1 should be optimized by the end user. Expect a band approximately ~45 kDa in size corresponding to Hice1 by Western Blotting in the appropriate cell lysate or extract. |
| **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 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. |
| **Precautions Note** | This product is for research use only and is not intended for therapeutic or diagnostic applications. |

## 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 ?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.

## Images




Anti-HICE1 in Western Blot using Abcepta 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.