

Anti-Hes1 Antibody

Catalog # ABO11502

Specification

Anti-Hes1 Antibody - Product Information

ApplicationWBPrimary Accession014469HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Transcription factor HES-1(HES1) detection. Tested with WB inHuman; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Hes1 Antibody - Additional Information

Gene ID 3280

Other Names Transcription factor HES-1, Class B basic helix-loop-helix protein 39, bHLHb39, Hairy and enhancer of split 1, Hairy homolog, Hairy-like protein, hHL, HES1, BHLHB39, HL, HRY

Calculated MW 29541 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Rat, Human, Mouse

Subcellular Localization Nucleus.

Protein Name Transcription factor HES-1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human Hes1(142-155aa HLANCMTQINAMTY), identical to the related mouse and rat sequences.

Purification Immunogen affinity purified.

Cross Reactivity



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Contains 1 bHLH (basic helix-loop-helix) domain.

Anti-Hes1 Antibody - Protein Information

Name HES1

Synonyms BHLHB39, HL, HRY

Function

Transcriptional repressor of genes that require a bHLH protein for their transcription. May act as a negative regulator of myogenesis by inhibiting the functions of MYOD1 and ASH1. Binds DNA on N-box motifs: 5'-CACNAG-3' with high affinity and on E-box motifs: 5'- CANNTG-3' with low affinity (By similarity). May play a role in a functional FA core complex response to DNA cross-link damage, being required for the stability and nuclear localization of FA core complex proteins, as well as for FANCD2 monoubiquitination in response to DNA damage.

Cellular Location Nucleus.

Anti-Hes1 Antibody - Protocols

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

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

Anti-Hes1 Antibody - Images





Anti-Hes1 antibody, ABO11502, Western blottingWB: Rat Kidney Tissue Lysate

Anti-Hes1 Antibody - Background

Transcription factor HES-1, also called HRY or HES-1 is a protein that is encoded by the HES1 gene. This gene belongs to a family of basic helix-loop-helix(bHLH) proteins that are essential for neurogenesis, myogenesis, hematopoiesis, and sex determination. This gene is mapped to 3q29. It is a transcriptional repressor of genes that require a bHLH protein for their transcription. The protein has a particular type of basic domain that contains a helix interrupting protein that binds to the N-box rather than the canonical E-box. This gene may act as a negative regulator of myogenesis by inhibiting the functions of MYOD1 and ASH1. It may play a role in a functional FA core complex response to DNA cross-link damage, being required for the stability and nuclear localization of FA core complex proteins, as well as for FANCD2 monoubiquitination in response to DNA damage.