

Anti-Hes1 Rabbit Monoclonal Antibody

Catalog # ABO13407

Specification

Anti-Hes1 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description Anti-Hes1 Rabbit Mor WB, IHC, IF, ICC, FC <u>Q14469</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-Hes1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-Hes1 Rabbit Monoclonal 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 WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
FC 1:50

Subcellular Localization Nucleus.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human Hes1

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Hes1 Rabbit Monoclonal 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 Rabbit Monoclonal Antibody - Protocols

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

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

Anti-Hes1 Rabbit Monoclonal Antibody - Images



IHC analysis of Hes1 using anti-Hes1 antibody (M01459) on human liver.

Hes1 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Hes1 Antibody (M01459) overnight at 4°C. Biotinylated goat anti Rabbit IgG IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using



Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Figure 1. Western blot analysis of Hes1 using anti-Hes1 antibody (M01459).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human U-87MG whole cell lysates,

Lane 2: human U251 whole cell lysates,

Lane 3: human 293T whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Hes1 antigen affinity purified monoclonal antibody (Catalog # M01459) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Hes1 at approximately 30 kDa.



Immunofluorescent analysis using the Antibody at 1:50 dilution.