

### **Anti-Hes1 Rabbit Monoclonal Antibody**

**Catalog # ABO13407** 

# **Specification**

# **Anti-Hes1 Rabbit Monoclonal Antibody - Product Information**

Application WB, IHC, IF, ICC, FC

Primary Accession

Host
Isotype

Q14469
Rabbit
Rabbit IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

**Description** 

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<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>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 monoubiguitination in response to DNA damage.

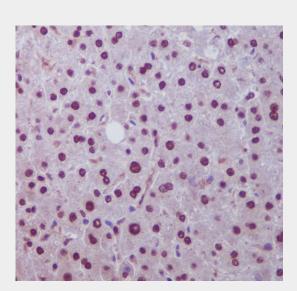
**Cellular Location**Nucleus.

### **Anti-Hes1 Rabbit Monoclonal Antibody - Protocols**

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

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

# 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.

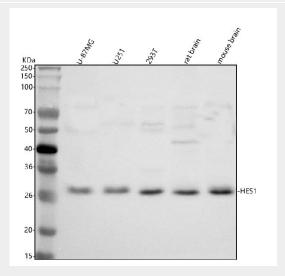


Figure 1. Western blot analysis of Hes1 using anti-Hes1 antibody (M01459). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

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

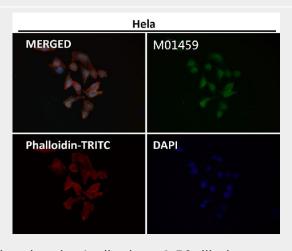
Lane 2: human U251 whole cell lysates,

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. The expected band size for Hes1 is at 30 kDa.



Immunofluorescent analysis using the Antibody at 1:50 dilution.