

## HES1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant HES1. Catalog # AT2355a

## **Specification**

## HES1 Antibody (monoclonal) (M02) - Product Information

WB, IF Application **Primary Accession** 014469 Other Accession NM 005524 Human, Rat Reactivity Host mouse Clonality **Monoclonal** Isotype IgG2b Kappa Calculated MW 29541

## HES1 Antibody (monoclonal) (M02) - 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

### Target/Specificity

HES1 (NP 005515, 36 a.a. ~ 142 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

## **Dilution**

WB~~1:500~1000 IF~~1:50~200

Clear, colorless solution in phosphate buffered saline, pH 7.2.

### Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

# **Precautions**

HES1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

# HES1 Antibody (monoclonal) (M02) - Protocols

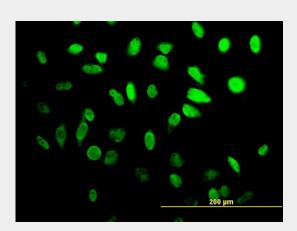
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

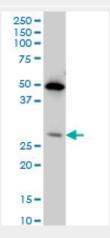


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# HES1 Antibody (monoclonal) (M02) - Images



Immunofluorescence of monoclonal antibody to HES1 on HeLa cell. [antibody concentration 10 ug/ml]



HES1 monoclonal antibody (M02), clone 3A3. Western Blot analysis of HES1 expression in H9c2(2-1).

## HES1 Antibody (monoclonal) (M02) - Background

This protein belongs to the basic helix-loop-helix family of transcription factors. 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.

## HES1 Antibody (monoclonal) (M02) - References

The expressions of bHLH gene HES1 and HES5 in advanced ovarian serous adenocarcinomas and their prognostic significance: a retrospective clinical study. Wang X, et al. J Cancer Res Clin Oncol, 2010 Jul. PMID 20091184. Hijacking HES1: how tumors co-opt the anti-differentiation strategies of quiescent cells. Sang L, et al. Trends Mol Med, 2010 Jan. PMID 20022559. Inhibition of Hes1 activity in gall bladder epithelial cells promotes insulin expression and glucose responsiveness. Coad RA, et





Tel: 858.875.1900 Fax: 858.875.1999

al. Biochem Cell Biol, 2009 Dec. PMID 19935883.Hes-6, an inhibitor of Hes-1, is regulated by 17beta-estradiol and promotes breast cancer cell proliferation. Hartman J, et al. Breast Cancer Res, 2009. PMID 19891787. Oncogenic BRAFV600E induces expression of neuronal differentiation marker MAP2 in melanoma cells by promoter demethylation and down-regulation of transcription repressor HES1. Maddodi N, et al. J Biol Chem, 2010 Jan 1. PMID 19880519.