10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HES1 Antibody (monoclonal) (M02)

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

Product Information

Application	WB, IF
Primary Accession	Q14469
Other Accession	NM_005524
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	3A3
Calculated MW	29541

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
Format	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.

Background

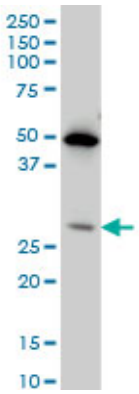
This protein belongs to the basic helix-loop-helix family of transcription factors. It is a transcriptional repressor of genes that require a bHLH protein for their transcription. The protein has a particular type of basic domain that contains a helix interrupting protein that binds to the N-box rather than the canonical E-box.

References

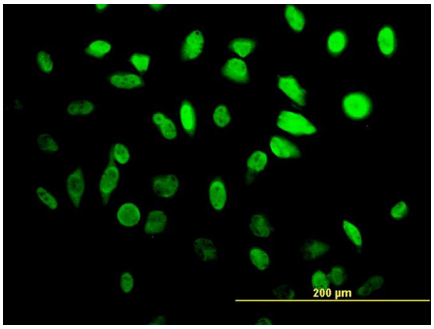
The expressions of bHLH gene HES1 and HES5 in advanced ovarian serous adenocarcinomas and their

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 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.

Images



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.