
Anti-Human Hes1 Purified

Catalog Number: 14-9799

Also known as: bHLHb39, Class B basic helix-loop-helix protein 39

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human Hes1 Purified
Catalog Number: 14-9799
Clone: 4H1HES1
Concentration: 0.5 mg/mL

REF

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.



LOT



Batch Code: Refer to vial

Use By: Refer to vial

Description

This 4H1HES monoclonal antibody reacts with human Hes1, a 30-kDa basic-helix-loop-helix transcriptional repressor. Hes1 is expressed in thymocytes, as well as neural, retinal, liver, and pancreatic tissues. Expression of Hes1 is controlled by Notch signaling, and thus plays an important role in T cell development. This regulation by Notch is also critical for neural stem cell differentiation and neurogenesis. Reports have demonstrated that Hes1 antagonizes transcription of MASH1, a basic-helix-loop-helix factor involved in neuronal determination. Finally, Hes1 has been associated with Notch-induced T cell acute lymphoblastic lymphoma and other cancers.

Applications Reported

This 4H1HES antibody has been reported for use in immunohistochemical staining of frozen (IHC-F) and formalin-fixed paraffin embedded (FFPE) tissue sections (IHC-P).

Applications Tested

This 4H1HES antibody has been tested by immunohistochemistry on FFPE human kidney cortex at less than or equal to 20 ug/mL both without antigen retrieval or with high pH antigen retrieval. It is recommended that this antibody be carefully titrated for optimal performance in the assay of interest.

References

Kiparissides A, Koutinas M, Moss T, Newman J, Pistikopoulos EN, Mantalaris A. Modelling the Delta1/Notch1 pathway: in search of the mediator(s) of neural stem cell differentiation. PLoS One. 2011 Feb 8;6(2):e14668.

Wendorff AA, Koch U, Wunderlich FT, Wirth S, Dubey C, Brüning JC, MacDonald HR, Radtke F. Hes1 is a critical but context-dependent mediator of canonical Notch signaling in lymphocyte development and transformation. Immunity. 2010 Nov 24;33(5):671-84.

Ou-Yang HF, Zhang HW, Wu CG, Zhang P, Zhang J, Li JC, Hou LH, He F, Ti XY, Song LQ, Zhang SZ, Feng L, Qi HW, Han H. Notch signaling regulates the FOXP3 promoter through RBP-J- and Hes1-dependent mechanisms. Mol Cell Biochem. 2009 Jan;320(1-2):109-14.

Kageyama R, Ohtsuka T, Tomita K. The bHLH gene Hes1 regulates differentiation of multiple cell types. Mol Cells. 2000 Feb 29;10(1):1-7.

Related Products

00-4953 IHC /ICC Blocking Buffer - Low Protein
00-4956 IHC Antigen Retrieval Solution – High pH (10X)
00-4960 Permout™ Mounting Medium
14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.8.1)

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