

HES5 Antibody

Catalog # ASC11878

Specification

HES5 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, IHC-P, IF, E <u>Q5TA89</u> <u>NP_001010926</u>, <u>388585</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 18 kDa

Observed: 17 kDa KDa HES5 antibody can be used for detection of HES5 by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.

HES5 Antibody - Additional Information

Gene ID Target/Specificity

388585

HES5 antibody was raised against a 19 amino acid peptide near the amino terminus of human HES5.

The immunogen is located within the first 50 amino acids of HES5.

Reconstitution & Storage

HES5 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions HES5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

HES5 Antibody - Protein Information

Name HES5

Synonyms BHLHB38

Function

Transcriptional repressor of genes that require a bHLH protein for their transcription. Plays an important role as neurogenesis negative regulator (By similarity).

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00380, ECO:0000255|PROSITE-ProRule:PRU00981}

Tissue Location



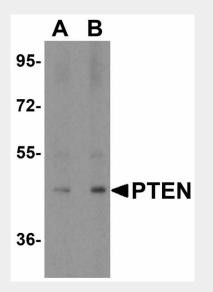
Expressed in fetal heart and brain tumors.

HES5 Antibody - Protocols

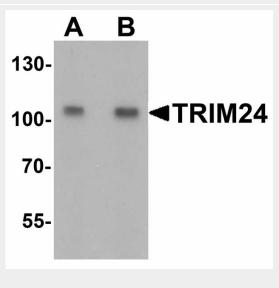
Provided below are standard protocols that you may find useful for product applications.

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

HES5 Antibody - Images



Western blot analysis of PTEN in human brain tissue lysate with PTEN antibody at (A) 1 and (B) 2 μ g/mL.





Western blot analysis of TRIM24 in A431 cell lysate with TRIM24 antibody at (A) 0.5 and (B) 1 $\mu\text{g/mL}.$

HES5 Antibody - Background

HES5 is a member of the HES family of transcriptional repressors, which are the mammalian homologs of the Drosophila Hairy and Enhancer of Split and contain basic Helix-loop-helix (bHLH) and Orange domains (1). The HES5 gene is a downstream target of the Notch signaling pathway and its expression is downregulated during human cartilage differentiation (2). HES5 can directly repress transcription of the E3 ligase FBW7-beta, creating a feedback loop that modulates Notch-mediated intestinal and neural stem cell fate decisions (3).

HES5 Antibody - References

Katoh M and Katoh M. Identification and characterization of human HES2, HES3, and HES5 genes in silico. Int. J. Oncol. 2004; 25:529-34.

Karlsson C, Jonsson M, Asp J, et al. Notch and HES5 are regulated during human cartilage differentiation. Cell Tissue Res. 2007; 327:539-51.

Sancho R, Blake SM, Tendeng C, et al. Fbw7 repression by hes5 creates a feedback loop that modulates Notch-mediated intestinal and neural stem cell fate decisions. PLoS Biol. 2013; 11:e1001586.