

CTTNBL1 Antibody

Catalog # ASC11290

Specification

CTTNBL1 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IHC, IF Q8WYA6

NP_110517, 18644734 Human, Mouse, Rat Rabbit

Polyclonal

IgG

CTTNBL1 antibody can be used for

detection of CTTNBL1 by Western blot at 1 and 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

CTTNBL1 Antibody - Additional Information

Gene ID **56259**

Target/Specificity

CTNNBL1; CTNNBL1 antibody is predicted to not cross-react with other catenin family members. At least four isoforms of CTNNBL1 are known to exist; this antibody will detect all but isoform b.

Reconstitution & Storage

CTTNBL1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

CTTNBL1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CTTNBL1 Antibody - Protein Information

Name CTNNBL1

Synonyms C20orf33

Function

Component of the PRP19-CDC5L complex that forms an integral part of the spliceosome and is required for activating pre-mRNA splicing. Participates in AID/AICDA-mediated somatic hypermutation (SHM) and class-switch recombination (CSR), 2 processes resulting in the production of high-affinity, mutated isotype-switched antibodies (PubMed:32484799).

Cellular Location

[Isoform 1]: Nucleus.



Tissue Location

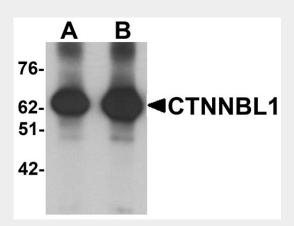
Widely expressed with highest levels in skeletal muscle, placenta, heart, spleen, testis and thyroid

CTTNBL1 Antibody - Protocols

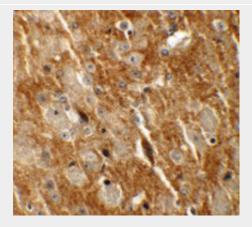
Provided below are standard protocols that you may find useful for product applications.

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

CTTNBL1 Antibody - Images

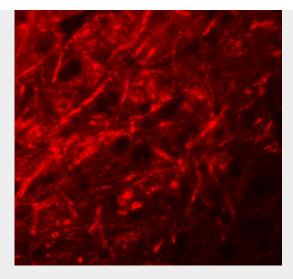


Western blot analysis of CTNNBL1 in human brain tissue lysate with CTNNBL1 antibody at (A) 1 and (B) 2 μ g/mL.



Immunohistochemistry of CTNNBL1 in mouse brain tissue with CTNNBL1 antibody at 5 μ g/mL.





Immunofluorescence of CTNNBL1 in mouse brain tissue with CTNNBL1 antibody at 20 $\mu g/mL$.

CTTNBL1 Antibody - Background

CTTNBL1 Antibody: The Beta-catenin-like protein 1 (CTNNBL1) contains an acidic domain, a putative bipartite nuclear localization signal, a nuclear export signal, a leucine-isoleucine zipper, and phosphorylation motifs, as well as Armadillo/beta-catenin-like repeats. Transient expression of CTNNBL1 resulted in translocation to the nucleus and apoptosis, suggesting it may be involved in the apoptotic pathway. CTNNBL1 interacts with the Prp19 complex of the spliceosome and the Ig class switching enzyme activation-induced deaminase (AID) and had been suggested to play a role in antibody-diversification and class switching, but recent studies have shown CTNNBL1 to be dispensable for Ig class switch recombination. Other studies have identified CTTNBL1 as a novel gene for obesity.

CTTNBL1 Antibody - References

Jabbour L, Welter JF, Kollar, et al. Sequence, gene structure, and expression pattern of CTNNBL1, a minor-class intron-containing gene - evidence for a role in apoptosis. Genomics 2003; 81:292-303. Conticello SG, Ganesh K, Xhu K, et al. Interaction between antibody-diversification enzyme AID and spliceosome-associated factor CTNNBL1. Mol. Cell 2008; 31:474-84.

Han L, Masani S, and Yu K. Cutting edge: CTNNBL1 is dispensable for Ig class switch recombination. J. Immunol. 2010; 185:1379-81.

Liu YJ, Liu XG, Wang L, et al. Genome-wide association scans identified CTNNBL1 as a novel gene for obesity. Hum. Mol. Genet. 2008; 17:1803-13.