10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

MYT1L Antibody
Catalog # ASC11567

Specification

MYT1L Antibody - Product Information

Application	**WB, IF**
Primary Accession	Q9UL68
Other Accession	NP_055840, 60498973
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**130 kDa KDa**
Application Notes	**MYT1L antibody can be used for detection of MYT1L by Western blot at 1 - 2 µg/mL. For immunofluorescence start at 20 µg/mL.**

MYT1L Antibody - Additional Information

Gene ID **23040**

Target/Specificity
MYT1L; At least three isoforms are known to exist. This antibody will only recognize the two longest isoforms.

Reconstitution & Storage
MYT1L antibody can be stored at 4℃ for three months and -20℃, 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
MYT1L Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MYT1L Antibody - Protein Information

Name MYT1L {ECO:0000303|Ref.1, ECO:0000312|HGNC:HGNC:7623}

Function
Transcription factor that plays a key role in neuronal differentiation by specifically repressing expression of non-neuronal genes during neuron differentiation. In contrast to other transcription repressors that inhibit specific lineages, mediates repression of multiple differentiation programs. Also represses expression of negative regulators of neurogenesis, such as members of the Notch signaling pathway, including HES1. The combination of three transcription factors, ASCL1, POU3F2/BRN2 and MYT1L, is sufficient to reprogram fibroblasts and other somatic cells into induced neuronal (iN) cells in vitro. Directly binds the 5'-AAGTT-3' core motif present on the promoter of target genes and represses transcription by recruiting a multiprotein complex containing SIN3B. The 5'-AAGTT-3' core motif is absent from the promoter of neural genes.

Cellular Location

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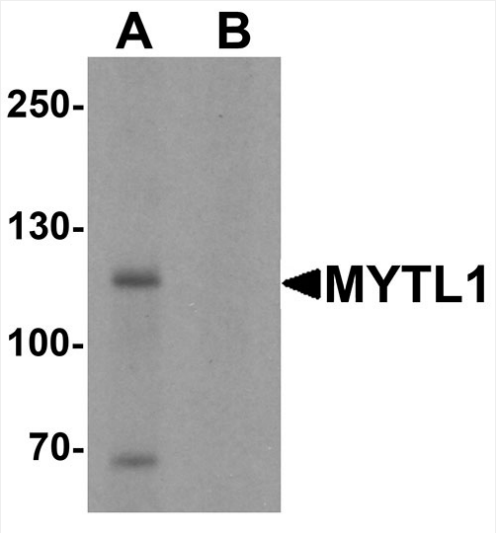
Nucleus {ECO:0000250|UniProtKB:P97500}. Chromosome {ECO:0000250|UniProtKB:P97500}. Note=Preferentially binds to DNA binding sites that are in an open chromatin configuration {ECO:0000250|UniProtKB:P97500}

MYT1L Antibody - Protocols

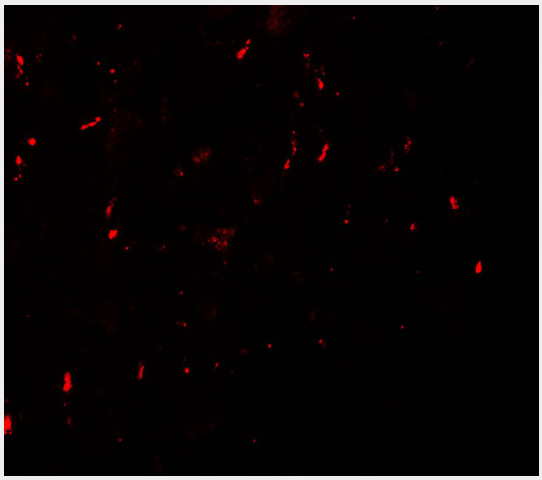
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MYT1L Antibody - Images



Western blot analysis of MYT1L in mouse brain tissue lysate with MYT1L antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.



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Immunofluorescence of MYT1L in human brain with MYT1L antibody at 20 µg/mL.

MYT1L Antibody - Background

MYT1L Antibody: The myelin transcription factor 1 family, to which the myelin transcription factor 1-like protein (MYT1L) belongs, is expressed primarily in the developing central nervous system and recruits histone deacetylase (HDAC) to regulate neural transcription. Both MYT1L and the related protein MYT1 interact with SIN3B, a protein that mediates transcriptional repression by binding to HDACs, suggesting that the MYT1 family favor the silencing of genes during neural development. Recent studies suggest that polymorphisms of MYT1L may be associated with schizophrenia.

MYT1L Antibody - References

Romm E, Nielsen JA, Kim JG, et al. Myt1 family recruits histone deacetylase to regulate neural transcription. J. Neurochem. 2005; 93:1444-53
Li W, Wang X, Zhao J, et al. Association study of myelin transcription factor 1-like polymorphisms with schizophrenia in Han Chinese population. Genes Brain Behav. 2012; 11:87-93.