

## TCF12 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant TCF12. Catalog # AT4182a

#### Specification

## TCF12 Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC <u>O99081</u> <u>NM\_207036</u> Human mouse Monoclonal IgG2a Kappa 72965

## TCF12 Antibody (monoclonal) (M01) - Additional Information

Gene ID 6938

**Other Names** Transcription factor 12, TCF-12, Class B basic helix-loop-helix protein 20, bHLHb20, DNA-binding protein HTF4, E-box-binding protein, Transcription factor HTF-4, TCF12, BHLHB20, HEB, HTF4

**Target/Specificity** TCF12 (NP\_996919, 364 a.a. ~ 453 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution WB~~1:500~1000 IHC~~1:100~500

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** TCF12 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### TCF12 Antibody (monoclonal) (M01) - Protocols

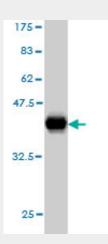
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides

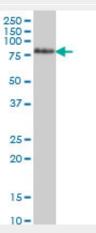


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TCF12 Antibody (monoclonal) (M01) - Images

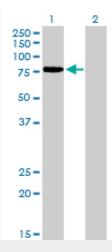


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.64 KDa).



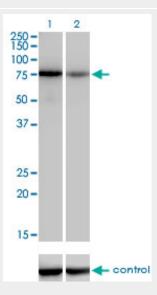
TCF12 monoclonal antibody (M01), clone 2E9 Western Blot analysis of TCF12 expression in Jurkat ( (Cat # AT4182a )



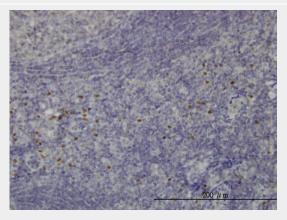


Western Blot analysis of TCF12 expression in transfected 293T cell line by TCF12 monoclonal antibody (M01), clone 2E9.

Lane 1: TCF12 transfected lysate(75.8 KDa). Lane 2: Non-transfected lysate.



Western blot analysis of TCF12 over-expressed 293 cell line, cotransfected with TCF12 Validated Chimera RNAi ( (Cat # AT4182a )



Immunoperoxidase of monoclonal antibody to TCF12 on formalin-fixed paraffin-embedded human tonsil. [antibody concentration 1 ug/ml]



# TCF12 Antibody (monoclonal) (M01) - Background

The protein encoded by this gene is a member of the basic helix-loop-helix (bHLH) E-protein family that recognizes the consensus binding site (E-box) CANNTG. This encoded protein is expressed in many tissues, among them skeletal muscle, thymus, B- and T-cells, and may participate in regulating lineage-specific gene expression through the formation of heterodimers with other bHLH E-proteins. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined.

## TCF12 Antibody (monoclonal) (M01) - References

Synergy between IL-15 and Id2 promotes the expansion of human NK progenitor cells, which can be counteracted by the E protein HEB required to drive T cell development. Schotte R, et al. J Immunol, 2010 Jun 15. PMID 20483740.Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.The variant rs1867277 in FOXE1 gene confers thyroid cancer susceptibility through the recruitment of USF1/USF2 transcription factors. Landa I, et al. PLoS Genet, 2009 Sep. PMID 19730683.AML1/ETO oncoprotein is directed to AML1 binding regions and co-localizes with AML1 and HEB on its targets. Gardini A, et al. PLoS Genet, 2008 Nov. PMID 19043539.CBFA2T3-ZNF652 corepressor complex regulates transcription of the E-box gene HEB. Kumar R, et al. J Biol Chem, 2008 Jul 4. PMID 18456661.