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TBX5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant TBX5.
Catalog # AT4171a

Product Information

Application	WB, E
Primary Accession	Q99593
Other Accession	BC027942
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1G10
Calculated MW	57711

Additional Information

Gene ID	6910
Other Names	T-box transcription factor TBX5, T-box protein 5, TBX5
Target/Specificity	TBX5 (AAH27942, 402 a.a. ~ 518 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
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	TBX5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

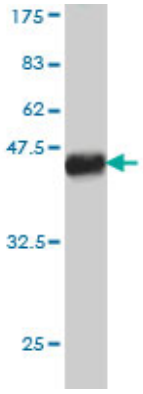
Background

This gene is a member of a phylogenetically conserved family of genes that share a common DNA-binding domain, the T-box. T-box genes encode transcription factors involved in the regulation of developmental processes. This gene is closely linked to related family member T-box 3 (ulnar mammary syndrome) on human chromosome 12. The encoded protein may play a role in heart development and specification of limb identity. Mutations in this gene have been associated with Holt-Oram syndrome, a developmental disorder affecting the heart and upper limbs. Several transcript variants encoding different isoforms have been described for this gene.

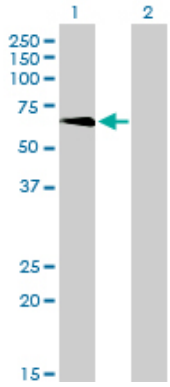
References

1.Holt-Oram syndrome with intermediate atrioventricular canal defect, and aortic coarctation: Functional characterization of a de novo TBX5 mutation.Baban A, Pitto L, Pulignani S, Cresci M, Mariani L, Gambacciani C, Digilio MC, Pongiglione G, Albanese SAm J Med Genet A. 2014 Jun;164(6):1419-24. doi: 10.1002/ajmg.a.36459. Epub 2014 Mar 24.2.Directing cardiomyogenic differentiation of human pluripotent stem cells by plasmid-based transient overexpression of cardiac transcription factors.Hartung S, Schwanke K, Haase A, David R, Franz WM, Martin U, Zweigerdt RStem Cells Dev. 2013 Apr 1;22(7):1112-25. doi: 10.1089/scd.2012.0351. Epub 2013 Jan 18.3.Physical interaction between TBX5 and MEF2C is required for early heart development.Ghosh TK, Song FF, Packham EA, Buxton S, Robinson TE, Ronksley J, Self T, Bonser AJ, Brook JD.Mol Cell Biol. 2009 Apr;29(8):2205-18. Epub 2009 Feb 9.

Images

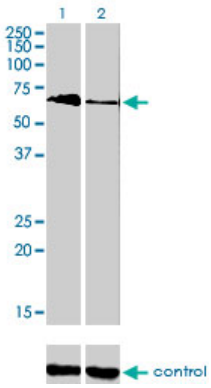


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (38.61 KDa) .



Western Blot analysis of TBX5 expression in transfected 293T cell line by TBX5 monoclonal antibody (M01), clone 1G10.

Lane 1: TBX5 transfected lysate(57.7 KDa).
Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged TBX5 is approximately 0.1ng/ml as a capture antibody.