

TBX5 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1295a

Product Information

Application WB, E **Primary Accession** Q99593 Reactivity Human Host Mouse Monoclonal Clonality **Clone Names** 7B11 Isotype IgG1 **Calculated MW** 57711

Description TBX5, also known as T-box 5. It 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. It is closely linked to related family member T-box 3 (ulnar mammary syndrome) on human chromosome 12. The TBX5 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.

Immunogen Purified recombinant fragment of TBX5 expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID 6910

Other Names T-box transcription factor TBX5, T-box protein 5, TBX5

Dilution WB~~1/500 - 1/2000 E~~N/A

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions TBX5 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name TBX5

Function

DNA-binding protein that regulates the transcription of several genes and is involved in heart development and limb pattern formation

(PubMed:<u>25725155</u>, PubMed:<u>25963046</u>, PubMed:<u>26917986</u>, PubMed:<u>27035640</u>, PubMed:<u>29174768</u>, PubMed:<u>8988164</u>). Binds to the core

DNA motif of NPPA promoter (PubMed: 26926761).

Cellular Location

Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00201, ECO:0000269 | PubMed:29174768}. Cytoplasm Note=Shuttles between the cytoplasm and the nucleus. Acetylation at Lys-339 promotes nuclear retention.

References

1. Physiol Genomics. 2004 Jul 8;18(2):129-40. 2. J Mol Cell Cardiol. 2003 Oct;35(10):1191-5.

Images

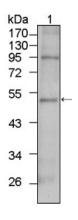


Figure 1: Western blot analysis using TBX5 mouse mAb against HepG2 cell lysate (1).

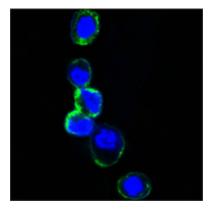


Figure 2: Confocal immunofluorescence analysis of HEK293 cells trasfected with extracellular ERBB3 (aa22-369)-hIgGFc using ERBB3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

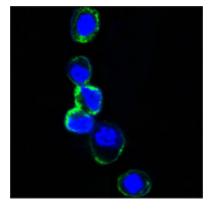


Figure 2: Confocal immunofluorescence analysis of HEK293 cells trasfected with extracellular ERBB3 (aa22-369)-hIgGFc using anti-ERBB3 monoclonal antioby (green). Blue: DRAQ5 fluorescent DNA dye.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.