

# ACTL7B Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ACTL7B. Catalog # AT1031a

#### **Product Information**

Application WB
Primary Accession O9Y614
Other Accession NM\_006686
Reactivity Human
Host mouse
Clonality monoclonal
Isotype IgG2a Kappa

Clone Names 6A4 Calculated MW 45234

### **Additional Information**

**Gene ID** 10880

Other Names Actin-like protein 7B, Actin-like-7-beta, ACTL7B

Target/Specificity ACTL7B (NP\_006677, 286 a.a. ~ 377 a.a) partial recombinant protein with GST

tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000

**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** ACTL7B Antibody (monoclonal) (M01) is for research use only and not for use

in diagnostic or therapeutic procedures.

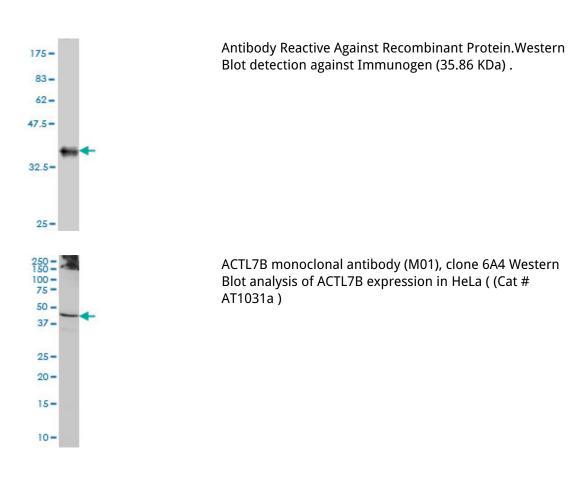
## **Background**

The protein encoded by this gene is a member of a family of actin-related proteins (ARPs) which share significant amino acid sequence identity to conventional actins. Both actins and ARPs have an actin fold, which is an ATP-binding cleft, as a common feature. The ARPs are involved in diverse cellular processes, including vesicular transport, spindle orientation, nuclear migration and chromatin remodeling. This gene (ACTL7B), and related gene, ACTL7A, are intronless, and are located approximately 4 kb apart in a head-to-head orientation within the familial dysautonomia candidate region on 9q31. Based on mutational analysis of the ACTL7B gene in patients with this disorder, it was concluded that it is unlikely to be involved in the pathogenesis of dysautonomia. Unlike ACTL7A, the ACTL7B gene is expressed predominantly in the testis, however, its exact function is not known.

### References

Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.DNA sequence and analysis of human chromosome 9. Humphray SJ, et al. Nature, 2004 May 27. PMID 15164053.Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.Methylation of CpG dinucleotides in the open reading frame of a testicular germ cell-specific intronless gene, Tact1/Act17b, represses its expression in somatic cells. Hisano M, et al. Nucleic Acids Res, 2003 Aug 15. PMID 12907721.

### **Images**



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