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SHOX2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant SHOX2.
Catalog # AT3885a

Product Information

Application	WB, E
Primary Accession	O60902
Other Accession	NM_006884
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1D1
Calculated MW	34953

Additional Information

Gene ID	6474
Other Names	Short stature homeobox protein 2, Homeobox protein Og12X, Paired-related homeobox protein SHOT, SHOX2, OG12X, SHOT
Target/Specificity	SHOX2 (NP_006875, 117 a.a. ~ 204 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	SHOX2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

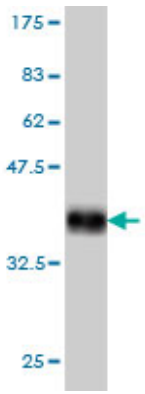
Background

This gene is a member of the homeobox family of genes that encode proteins containing a 60-amino acid residue motif that represents a DNA binding domain. Homeobox genes have been characterized extensively as transcriptional regulators involved in pattern formation in both invertebrate and vertebrate species. Several human genetic disorders are caused by aberrations in human homeobox genes. This locus represents a pseudoautosomal homeobox gene that is thought to be responsible for idiopathic short stature, and it is implicated in the short stature phenotype of Turner syndrome patients. This gene is considered to be a candidate gene for Cornelia de Lange syndrome. Alternative splicing results in multiple transcript variants.

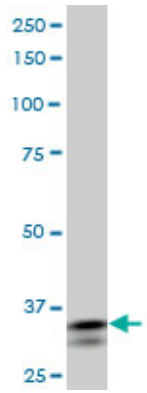
References

High-density association study of 383 candidate genes for volumetric BMD at the femoral neck and lumbar spine among older men. Yerges LM, et al. J Bone Miner Res, 2009 Dec. PMID 19453261.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.An unappreciated role for RNA surveillance. Hillman RT, et al. Genome Biol, 2004. PMID 14759258.Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.

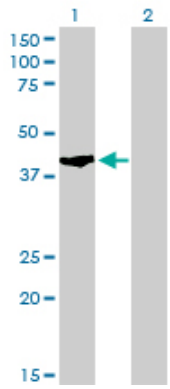
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.42 KDa) .



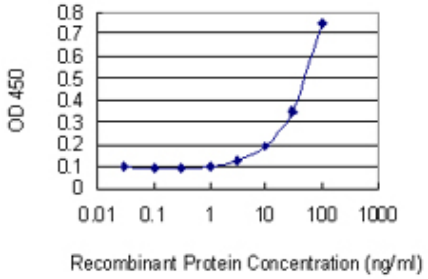
SHOX2 monoclonal antibody (M01), clone 1D1 Western Blot analysis of SHOX2 expression in PC-12 ((Cat # AT3885a)

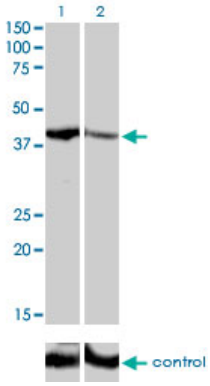


Western Blot analysis of SHOX2 expression in transfected 293T cell line by SHOX2 monoclonal antibody (M01), clone 1D1.

Lane 1: SHOX2 transfected lysate(37.6 KDa).
Lane 2: Non-transfected lysate.

Detection limit for recombinant GST tagged SHOX2 is 1 ng/ml as a capture antibody.





Western blot analysis of SHOX2 over-expressed 293 cell line, cotransfected with SHOX2 Validated Chimera RNAi ((Cat # AT3885a)