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SP7 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant SP7.
Catalog # AT4011a

Product Information

Application	WB, IF, E
Primary Accession	Q8TDD2
Other Accession	NM_152860
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2G6
Calculated MW	44994

Additional Information

Gene ID	121340
Other Names	Transcription factor Sp7, Zinc finger protein osterix, SP7, OSX
Target/Specificity	SP7 (NP_690599, 87 a.a. ~ 162 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 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	SP7 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

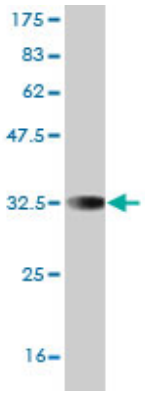
This gene encodes a member of the Sp subfamily of Sp/XKLF transcription factors. Sp family proteins are sequence-specific DNA-binding proteins characterized by an amino-terminal trans-activation domain and three carboxy-terminal zinc finger motifs. This protein is a bone specific transcription factor and is required for osteoblast differentiation and bone formation.

References

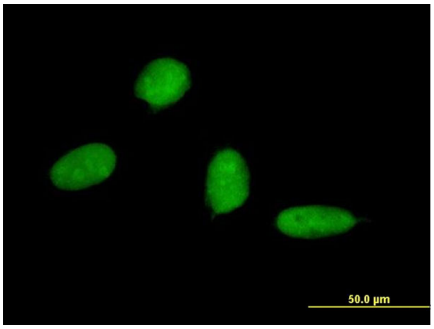
Identification of a frameshift mutation in Osterix in a patient with recessive osteogenesis imperfecta. Lapunzina P, et al. Am J Hum Genet, 2010 Jul 9. PMID 20579626.Replication of previous genome-wide association studies of bone mineral density in premenopausal American women. Ichikawa S, et al. J Bone

Miner Res, 2010 Aug. PMID 20200978.Regulation of the osteoblast-specific transcription factor Osterix by NO66, a Jumonji family histone demethylase. Sinha KM, et al. EMBO J, 2010 Jan 6. PMID 19927124.Twenty bone-mineral-density loci identified by large-scale meta-analysis of genome-wide association studies. Rivadeneira F, et al. Nat Genet, 2009 Nov. PMID 19801982.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.

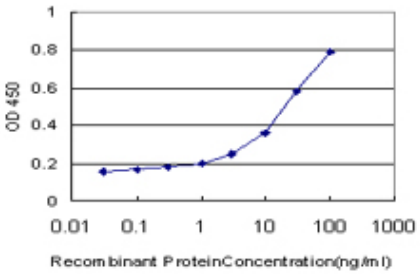
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (34.1 KDa) .



Immunofluorescence of monoclonal antibody to SP7 on HeLa cell . [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged SP7 is approximately 1ng/ml as a capture antibody.

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