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SIX1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21689c

Product Information

Application	WB, E
Primary Accession	Q15475
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53311
Calculated MW	32210

Additional Information

Gene ID	6495
Other Names	Homeobox protein SIX1, Sine oculis homeobox homolog 1, SIX1
Target/Specificity	This SIX1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 69-102 amino acids from the Central region of human SIX1.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SIX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SIX1
Function	Transcription factor that is involved in the regulation of cell proliferation, apoptosis and embryonic development (By similarity). Plays an important role in the development of several organs, including kidney, muscle and inner ear (By similarity). Depending on context, functions as a transcriptional repressor or activator (By similarity). Lacks an activation domain, and requires

interaction with EYA family members for transcription activation (PubMed:15141091). Mediates nuclear translocation of EYA1 and EYA2 (PubMed:19497856). Binds the 5'-TCA[AG][AG]TTNC-3' motif present in the MEF3 element in the MYOG promoter and CIDEA enhancer (PubMed:15141091, PubMed:19497856, PubMed:23435380, PubMed:27923061). Regulates the expression of numerous genes, including MYC, CCND1 and EZR (By similarity). Acts as an activator of the IGFBP5 promoter, probably coactivated by EYA2 (By similarity). Repression of precursor cell proliferation in myoblasts is switched to activation through recruitment of EYA3 to the SIX1-DACH1 complex (By similarity). During myogenesis, seems to act together with EYA2 and DACH2 (By similarity). Regulates the expression of CCNA1 (PubMed:15123840). Promotes brown adipocyte differentiation (By similarity).

Cellular Location Nucleus. Cytoplasm

Tissue Location Specifically expressed in skeletal muscle.

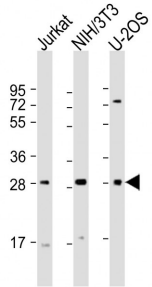
Background

Transcription factor that is involved in the regulation of cell proliferation, apoptosis and embryonic development. Plays an important role in the development of several organs, including kidney, muscle and inner ear. Depending on context, functions as transcriptional repressor or activator. Lacks an activation domain, and requires interaction with EYA family members for transcription activation. Mediates nuclear translocation of EYA1 and EYA2. Binds the 5'-TCA[AG][AG]TTNC-3' motif present in the MEF3 element in the MYOG promoter. Regulates the expression of numerous genes, including MYC, CCND1 and EZR. Acts as activator of the IGFBP5 promoter, probably coactivated by EYA2. Repression of precursor cell proliferation in myoblasts is switched to activation through recruitment of EYA3 to the SIX1-DACH1 complex. During myogenesis, seems to act together with EYA2 and DACH2 (By similarity). Regulates the expression of CCNA1.

References

Boucher C.A.,et al.Genomics 33:140-142(1996).
Gallardo M.E.,et al.Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Ford H.L.,et al.J. Biol. Chem. 275:22245-22254(2000).
Coletta R.D.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:6478-6483(2004).

Images



All lanes : Anti-SIX1 Antibody (Center) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: NIH/3T3 whole cell lysate Lane 3: U-2OS whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 32 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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