

SIX1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21689c

Specification

SIX1 Antibody (Center) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>Q15475</u> Human, Mouse Rabbit polyclonal Rabbit IgG 32210

SIX1 Antibody (Center) - 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.

SIX1 Antibody (Center) - 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:<u>15141091</u>). Mediates nuclear translocation of EYA1 and EYA2 (PubMed:<u>19497856</u>). Binds the 5'-TCA[AG][AG]TTNC-3' motif present in the MEF3 element in the MYOG promoter and CIDEA enhancer (PubMed:<u>15141091</u>, PubMed:<u>19497856</u>, PubMed:<u>23435380</u>, PubMed:<u>27923061</u>). 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:<u>15123840</u>). Promotes brown adipocyte differentiation (By similarity).

Cellular Location Nucleus. Cytoplasm

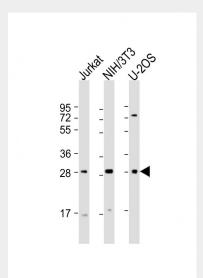
Tissue Location Specifically expressed in skeletal muscle.

SIX1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SIX1 Antibody (Center) - 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 μ g 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.



SIX1 Antibody (Center) - 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.

SIX1 Antibody (Center) - 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).