

Anti-SIX1 Picoband Antibody

Catalog # ABO12575

Product Information

Application	WB
Primary Accession	Q15475
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Homeobox protein SIX1(SIX1) detection. Tested with WB in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	6495
Other Names	Homeobox protein SIX1, Sine oculis homeobox homolog 1, SIX1
Calculated MW	32210
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Nucleus . Cytoplasm.
Tissue Specificity	Specifically expressed in skeletal muscle.
Source	Eukaryota
Protein Name	Homeobox protein SIX1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SIX1 (245-282aa NYSLPGLTASQPSHGLQTHQHQLQDSLLGPLTSSLVDL), different from the related mouse sequence by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20° C for one year. After reconstitution, at 4° C for one month. It can also be aliquotted and stored frozen at -20° C for a longer time. Avoid repeated freezing and thawing.

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

Homeobox protein SIX1 (Sineoculis homeobox homolog 1) is a protein that in humans is encoded by the SIX1 gene. It is mapped to 14q23.1. The protein encoded by this gene is a homeobox protein that is similar to the Drosophila 'sine oculis' gene product. This gene is found in a cluster of related genes on chromosome 14 and is thought to be involved in limb development. Defects in this gene are a cause of autosomal dominant deafness type 23 (DFNA23) and branchioototic syndrome type 3 (BOS3).

Images



Western blot analysis of SIX1 expression in MCF-7 whole cell lysates (lane 1) and 22RV1 whole cell lysates (lane 2). SIX1 at 37KD was detected using rabbit anti- SIX1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12575) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

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