

Anti-SIX1 Picoband Antibody

Catalog # ABO12575

#### Specification

# Anti-SIX1 Picoband Antibody - Product Information

ApplicationWBPrimary Accession015475HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionSIX1(SIX1) detection. Tested with WB inHuman.

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

#### Anti-SIX1 Picoband Antibody - Additional Information

Gene ID 6495

**Other Names** Homeobox protein SIX1, Sine oculis homeobox homolog 1, SIX1

Calculated MW 32210 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human<br>

Subcellular Localization Nucleus . Cytoplasm.

**Tissue Specificity** Specifically expressed in skeletal muscle.

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 r°Constitution, 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.

# Anti-SIX1 Picoband Antibody - 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:<a href="http://www.uniprot.org/citations/15141091" target="\_blank">15141091</a>). Mediates nuclear translocation of EYA1 and EYA2 (PubMed:<a href="http://www.uniprot.org/citations/19497856" target=" blank">19497856</a>). Binds the 5'-TCA[AG][AG]TTNC-3' motif present in the MEF3 element in the MYOG promoter and CIDEA enhancer (PubMed: <a href="http://www.uniprot.org/citations/15141091" target=" blank">15141091</a>, PubMed:<a href="http://www.uniprot.org/citations/19497856" target=" blank">19497856</a>, PubMed:<a href="http://www.uniprot.org/citations/23435380" target=" blank">23435380</a>, PubMed:<a href="http://www.uniprot.org/citations/27923061" target=" blank">27923061</a>). 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:<a href="http://www.uniprot.org/citations/15123840" target=" blank">15123840</a>). Promotes brown adipocyte differentiation (By similarity).

Cellular Location Nucleus. Cytoplasm

**Tissue Location** Specifically expressed in skeletal muscle.

# Anti-SIX1 Picoband Antibody - Protocols

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

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



#### • <u>Cell Culture</u> Anti-SIX1 Picoband Antibody - 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) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

# Anti-SIX1 Picoband Antibody - 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 branchiootic syndrome type 3 (BOS3).