10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Anti-SIX1 Antibody

Catalog # AP60965

## Product Information

| | |
|---|---|
| **Application** | WB |
| **Primary Accession** | Q15475 |
| **Reactivity** | Human, Mouse, Rat, Mk |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 32210 |

## Additional Information

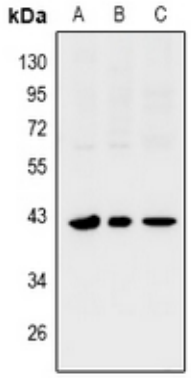
| | |
|---|---|
| **Gene ID** | 6495 |
| **Other Names** | Homeobox protein SIX1; Sine oculis homeobox homolog 1 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SIX1. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000) |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## 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. |

## Images




Western blot analysis of SIX1 expression in PC12 (A), MEF (B), COS7 (C) whole cell lysates. (Predicted band size: 32 kD; Observed band size: 43 kD)

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