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SIX2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17338c

Specification

SIX2 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q9NPC8
Other Accession	Q27350, Q62232, Q9I8H0, Q62231, Q15475, Q6NZ04, Q6DHF9, NP_058628.3
Reactivity	**Human**
Predicted	**Zebrafish, Mouse, Xenopus, Drosophila**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**32286**
Antigen Region	**89-119**

SIX2 Antibody (Center) - Additional Information

Gene ID 10736

Other Names
Homeobox protein SIX2, Sine oculis homeobox homolog 2, SIX2

Target/Specificity
This SIX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-119 amino acids from the Central region of human SIX2.

Dilution
WB~~1:1000
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
SIX2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SIX2 Antibody (Center) - Protein Information

Name SIX2

Function Transcription factor that plays an important role in the development of several organs, including kidney, skull and stomach. During kidney development, maintains cap mesenchyme multipotent nephron progenitor cells in an undifferentiated state by opposing the inductive signals emanating from the ureteric bud and cooperates with WNT9B to promote renewing progenitor cells proliferation. Acts through its interaction with TCF7L2 and OSR1 in a canonical Wnt signaling independent manner preventing transcription of differentiation genes in cap mesenchyme such as WNT4. Also acts independently of OSR1 to activate expression of many cap mesenchyme genes, including itself, GDNF and OSR1. During craniofacial development plays a role in growth and elongation of the cranial base through regulation of chondrocyte differentiation. During stomach organogenesis, controls pyloric sphincter formation and mucosal growth through regulation of a gene network including NKX2-5, BMPR1B, BMP4, SOX9 and GREM1. During branchial arch development, acts to mediate HOXA2 control over the insulin-like growth factor pathway. May also be involved in limb tendon and ligament development (By similarity). Plays a role in cell proliferation and migration.

Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q62232}.

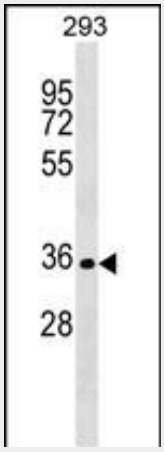
Tissue Location
Strongly expressed in skeletal muscle. Expressed in Wilms' tumor and in the cap mesenchyme of fetal kidney (at protein level).

SIX2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SIX2 Antibody (Center) - Images



SIX2 Antibody (Center) (Cat. #AP17338c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the SIX2 antibody detected the SIX2 protein (arrow).

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SIX2 Antibody (Center) - Background

This gene is a member of the vertebrate gene family which encode proteins homologous to the Drosophila 'sine oculis' homeobox protein. The encoded protein is a transcription factor which, like other members of this gene family, may be involved in limb or eye development.

SIX2 Antibody (Center) - References

Kumar, J.P. Cell. Mol. Life Sci. 66(4):565-583(2009)
Weber, S., et al. J. Am. Soc. Nephrol. 19(5):891-903(2008)
Christensen, K.L., et al. Adv. Cancer Res. 101, 93-126 (2008) :
Buller, C., et al. Hum. Mol. Genet. 10(24):2775-2781(2001)
Boucher, C.A., et al. Gene 247 (1-2), 145-151 (2000) :