Anti-SIX2 Antibody

ER2001-39

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	WB
Molecular Wt:	32 kDa

Description: 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 . Also may be involved in limb tendon and ligament development. Plays a role in cell proliferation and migration (By similarity).

Immunogen: Synthetic peptide within mouse six2 aa 100-160.

Positive control: Mouse kidney tissue lysate, mouse stomach tissue lysate.

Subcellular location: Nucleus.

Database links: SwissProt: Q62232 Mouse

Recommended Dilutions:

WB	1:500

Storage Buffer: 1*TBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

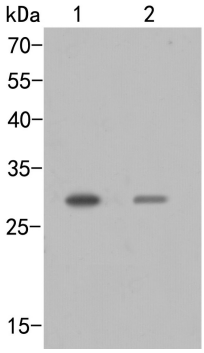

Fig1: Western blot analysis of SIX2 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ER2001-39, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: Mouse kidney tissue lysate
Lane 2: Mouse stomach tissue lysate

Background References

1. Oliver G. et. al. Homeobox genes and connective tissue patterning. Development 121:693-705(1995).