

For Research Use Only

# SIX2 Polyclonal antibody

Catalog Number: 11562-1-AP

Featured Product

247 Publications



## Basic Information

**Catalog Number:**

11562-1-AP

**Size:**

150ul , Concentration: 750 µg/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG2124

**GenBank Accession Number:**

BC024033

**GeneID (NCBI):**

10736

**UNIPROT ID:**

Q9NPC8

**Full Name:**

SIX homeobox 2

**Calculated MW:**

291 aa, 32 kDa

**Observed MW:**

32-37 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

## Applications

**Tested Applications:**

IP, ELISA

**Cited Applications:**

WB, IP, CHIP

**Species Specificity:**

human

**Cited Species:**

human, rat, mouse, rabbit, pig, Alligator, canine

**Positive Controls:**

IP : HEK-293 cells,

## Background Information

The SIX proteins (sine oculis) are a family of homeodomain transcription factors that share a conserved DNA binding domain. Six members (Six1-Six6) of the Six gene family have been identified in mice and humans. SIX2, containing one homeobox DNA-binding domain, is highly expressed in fetal tissues but expression is limited in adult tissues. SIX2 may be involved in limb tendon and ligament development[PMID:21420949]. It has been previously shown that SIX2 is expressed in developing mesenchymal tissue including head and urogenital system at the time of overt midfacial and renal differentiation[PMID: 22282599]. This antibody is a rabbit polyclonal antibody raised against full length SIX2 of human origin.

## Notable Publications

Author	Pubmed ID	Journal	Application
Ravian L van Ineveld	36180532	Nat Protoc	
Bingjue Li	32715474	J Pathol	
Ken Hiratsuka	36129975	Sci Adv	

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

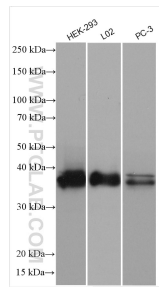
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

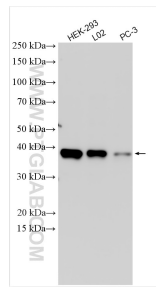
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

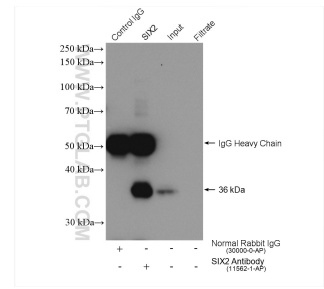
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 11562-1-AP (SIX2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 11562-1-AP (SIX2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



IP result of anti-SIX2 (IP:11562-1-AP, 4ug; Detection:11562-1-AP 1:1000) with HEK-293 cells lysate 1320 ug.

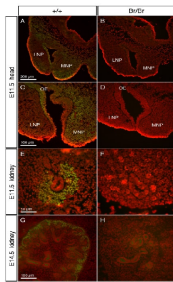
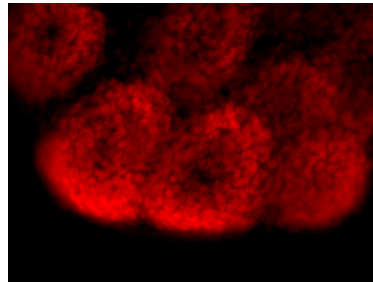


Fig. 7. Immunofluorescent staining of Six2 in wild-type and Br/Br embryos. Six2 staining is shown in green; white nuclei stained with propidium iodide are in red, and areas of overlapping signal are shown as yellow. Six2 only localized in cell nuclei as expected for a transcription factor. A, C: In wild-type E11.5 heads, Six2 was localized primarily in the lateral and midline mesenchyme, extending dorsally into the developing chondrocranium. Six2 was also localized to the olfactory epithelium of the nasal pits. B, D: In Br/Br embryos, Six2 staining was not detected in any of these tissues. E: At E11.5, the UB has begun to branch into the MM, and Six2 staining in wild-type embryos was strong in the MM surrounding the UB subunit. F: In the Br/Br E11.5 kidneys, Six2 was not detected. G, H: In the E14.5 wild-type kidney, Six2 was localized around the periphery of the developing kidney in the undifferentiated MM cells (G), while Six2 staining in the disorganized Br/Br E14.5 kidneys is absent (H). LNP, lateral nasal prominence; MNP, medial nasal prominence; OE, olfactory epithelium.



IF result of SIX2 antibody (11562-1-AP, 1:200) with mouse embryonic kidney rudiment dissected at E13.5 and cultured for 2 days by Dr. Aleksandra Rak-Raszewska. SIX2 positive cells (red) in condense metanephric mesenchyme surrounding the ureteric bud tip.

IF result from Fogelgren B, PMID:18570229, "Misexpression of Six2 is associated with heritable frontonasal dysplasia and renal hypoplasia in 3H1 Br mice."