# Six3 (H-59): sc-134776



The Power to Question

# **BACKGROUND**

The Six proteins (sine oculis) are a family of homeodomain transcription factors that share a conserved DNA binding domain. Six3 is required for the specification and proliferation of the eye field in vertebrates and may be involved in some developmental disorders of the brain. Expression of Six3 is detected in human embryos as early as 5-7 weeks of gestation; expression is maintained in the eye throughout the entire period of fetal development. At 20 weeks of gestation, expression of Six3 in the human retina has been observed in ganglion cells and in cells of the inner nuclear layer. Six3 maps to human chromosome 2p21, between genetic markers D2S119 and D2S288. The map position of human Six3 overlaps the positions of two dominant disorders (holoprosencephaly type 2 and malattia leventinese) with ocular phenotypes that have been assigned to this chromosomal region.

# **CHROMOSOMAL LOCATION**

Genetic locus: SIX3 (human) mapping to 2p21; Six3 (mouse) mapping to 17 E4.

### **SOURCE**

Six3 (H-59) is a rabbit polyclonal antibody raised against amino acids 269-327 mapping near the C-terminus of Six3 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-134776 X, 200  $\mu g/0.1$  ml.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **APPLICATIONS**

Six3 (H-59) is recommended for detection of Six3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Six3 (H-59) is also recommended for detection of Six3 in additional species, including bovine and avian.

Suitable for use as control antibody for Six3 siRNA (h): sc-38788, Six3 siRNA (m): sc-38789, Six3 shRNA Plasmid (h): sc-38788-SH, Six3 shRNA Plasmid (m): sc-38789-SH, Six3 shRNA (h) Lentiviral Particles: sc-38788-V and Six3 shRNA (m) Lentiviral Particles: sc-38789-V.

Six3 (H-59) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

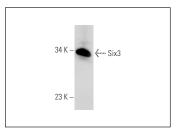
Molecular Weight of Six3: 37 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **DATA**



Six3 (H-59): sc-134776. Western blot analysis of Six3 expression in NIH/3T3 whole cell lysate.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try Six3 (A-1): sc-398797 or Six3 (G-7): sc-398796, our highly recommended monoclonal alternatives to Six3 (H-59).

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