

Datasheet for ABIN5518955
anti-SIX3 antibody (N-Term)



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1 Image

Overview

Quantity:	100 µg
Target:	SIX3
Binding Specificity:	AA 1-32, N-Term
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SIX3 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Homeobox protein SIX3(SIX3) detection. Tested with WB in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human Six3 (1-32aa MVFRSPLDLYSSHFLPNFADSHHRSILLASS), different from the related mouse sequence by two amino acids.
Sequence:	MVFRSPLDLY SSHFLPNFA DSHHRSILLA SS
Isotype:	IgG
Cross-Reactivity (Details):	<p>Predicted Cross Reactivity: human</p> <p>No cross reactivity with other proteins.</p> <p>Predicted Cross Reactivity: Species predicted to be fit for the product based on sequence similarities.</p>

Product Details

Characteristics:	Rabbit IgG polyclonal antibody for Homeobox protein SIX3(SIX3) detection. Tested with WB in Human,Mouse,Rat. Gene Name: SIX homeobox 3 Protein Name: Homeobox protein SIX3
Purification:	Immunogen affinity purified.

Target Details

Target:	SIX3
Alternative Name:	SIX3 (SIX3 Products)
Background:	<p>Homeobox protein SIX3 is a protein that in humans is encoded by the SIX3 gene. This gene encodes a member of the sine oculishomeobox transcription factor family. The encoded protein plays a role in eye development. Mutations in SIX3 are the cause of a severe brain malformation, called holoprosencephaly type 2 (HPE2). In HPE2, the brain fails to separate into two hemispheres during early embryonic development, leading to eye and brain malformations, which result in serious facial abnormalities. A mutant zebrafish knockout model has been developed, in which the anterior part of the head was missing due to the atypical increase of Wnt1 activity. When injected with SIX3, these zebrafish embryos were able to successfully develop a normal forebrain. When SIX3 was turned off in mice, resulting in a lack of retina formation due to excessive expression of Wnt8b in the region where the forebrain normally develops. Both of these studies demonstrate the importance of SIX3 activity in brain and eye development.</p> <p>Synonyms: Homeobox protein SIX3, Sine oculis homeobox homolog 3, SIX3</p>
Gene ID:	6496
UniProt:	O95343
Pathways:	Protein targeting to Nucleus

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Mouse, Rat, Predicted Species: Human Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. Optimal dilutions should be determined by end users.
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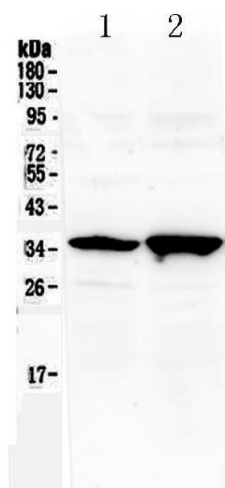
Application Details

Comment:	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Images



Western Blotting

Image 1. Western blot analysis of Six3 using anti-Six3 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50µg of sample under reducing conditions. Lane 1: rat brain tissue lysate, Lane 2: mouse brain tissue lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Six3 antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-

0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Six3 at approximately 35KD. The expected band size for Six3 is at 35KD.