

Datasheet for ABIN5647434  
**anti-SIX3 antibody (AA 1-32)**



[Go to Product page](#)

1 Image

## Overview

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

## Product Details

Immunogen:	Amino acids 1-32 (MVFRSPLDLYSSHFLLPNFADSHHRSILLASS) were used as the immunogen for the Six3 antibody.
Isotype:	IgG
Cross-Reactivity (Details):	Expected species reactivity: Human
Purification:	Antigen affinity purified

## Target Details

Target:	SIX3
Alternative Name:	Six3 ( <a href="#">SIX3 Products</a> )
Background:	Homeobox protein SIX3 is a protein that in humans is encoded by the SIX3 gene. This gene

## Target Details

---

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.

---

UniProt: [O95343](#)

---

Pathways: [Protein targeting to Nucleus](#)

## Application Details

---

---

Application Notes: Optimal dilution of the Six3 antibody should be determined by the researcher.\. Western Blot: 0.5-1 µg/mL

---

Restrictions: For Research Use only

## Handling

---

---

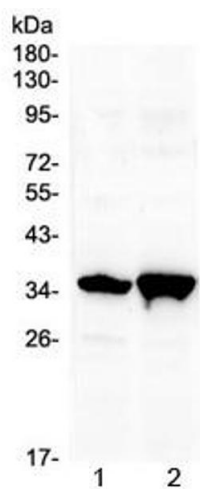
Buffer: 0.5 mg/mL if reconstituted with 0.2 mL sterile DI water

---

Storage: -20 °C

---

Storage Comment: After reconstitution, the Six3 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.



Western Blotting

**Image 1.** Western blot testing of 1) rat brain and 2) mouse brain with Six3 antibody at 0.5ug/ml. Predicted molecular weight ~35 kDa.