## abcam

## Product datasheet

## Anti-SOX3 antibody [CL4725] ab242366

## 1 Image

## Overview

Product name
Description
Host species
Tested applications
Species reactivity
Immunogen

## Epitope

Positive control
General notes

Anti-SOX3 antibody [CL4725]
Mouse monoclonal [CL4725] to SOX3
Mouse
Suitable for: WB
Reacts with: Human
Recombinant fragment corresponding to Human SOX3 aa 1-150. Database link: P41225

## Run BLAST with

Run BLAST with
Binds to an epitope located within the peptide sequence LISLPFPPDS as determined by overlapping synthetic peptides.

WB: NTERA-2 cell lysate.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q\&As

## Properties

| Form | Liquid |
| :--- | :--- |
| Storage instructions | Shipped at $4^{\circ} \mathrm{C}$. Store at $+4^{\circ} \mathrm{C}$ short term (1-2 weeks). Upon delivery aliquot. Store at $-20^{\circ} \mathrm{C}$ long <br> term. Avoid freeze / thaw cycle. <br> Storage buffer |
|  | pH: 7.20 <br>  <br>  <br> Preservative: $0.02 \%$ Sodium azide <br> Constituents: $40 \%$ Glycerol (glycerin, glycerine), PBS <br> Purity <br> Clonality |
| Protein A purified |  |
| Clone number | Monoclonal |
| Isotype | CL4725 |
|  | $\operatorname{lgG1}$ |

## Applications

The Abpromise guarantee
Our Abpromise guarantee covers the use of ab242366 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
| :--- | :--- | :--- |
| WB |  | Use a concentration of $1 \mu \mathrm{~g} / \mathrm{ml}$. Predicted molecular weight: 45 <br> kDa. |

## Target

| Function | Transcription factor required during the formation of the hypothalamo-pituitary axis. May function as a switch in neuronal development. Keeps neural cells undifferentiated by counteracting the activity of proneural proteins and suppresses neuronal differentiation. Required also within the pharyngeal epithelia for craniofacial morphogenesis. Controls a genetic switch in male development. Is necessary for initiating male sex determination by directing the development of supporting cell precursors (pre-Sertoli cells) as Sertoli rather than granulosa cells. |
| :---: | :---: |
| Involvement in disease | Defects in SOX3 are a cause of panhypopituitarism X-linked (PHPX) [MIM:312000]. Affected individuals have absent infundibulum, anterior pituitary hypoplasia, and ectopic posterior pituitary. Defects in SOX3 are the cause of mental retardation X-linked with isolated growth hormone deficiency (MRXGH) [MIM:300123]. <br> Defects in SOX3 are the cause of $46, \mathrm{XX}$ sex reversal type 3 (SRXX3) [MIM:300833]. A condition in which male gonads develop in a genetic female (female to male sex reversal). Note=Copy number variations (CNV) encompassing or in close proximity to SOX3 are responsible for XX male reversal. These variations include two duplications of approximately 123 kb and 85 kb , the former of which spans the entire SOX3 gene; a 343 kb deletion immediately upstream of SOX3 that is probably responsible of altered regulation (and not increased dosage) of SOX3; a large (approximately 6 Mb ) duplication that encompasses SOX3 and at least 18 additional distally located genes. Its proximal breakpoint falls within the SOX3 regulatory region. This large rearrangement has been found in a patient with XX male reversal and a complex phenotype that also includes a scrotal hypoplasia, microcephaly, developmental delay, and growth retardation. |
| Sequence similarities | Contains 1 HMG box DNA-binding domain. |
| Cellular localization | Nucleus. |



Western blot - Anti-SOX3 antibody [CL4725] (ab242366)

Anti-SOX3 antibody [CL4725] (ab242366) at $1 \mu \mathrm{~g} / \mathrm{ml}+$ NTERA-2 (human malignant pluripotent embryonic carcinoma cell line) cell lysate

Predicted band size: 45 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
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