abcam

Product datasheet

Anti-SOX3 antibody [CL4725] ab242366

1 Image

Overview

Product name Anti-SOX3 antibody [CL4725]

Description Mouse monoclonal [CL4725] to SOX3

Host species Mouse

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Immunogen Recombinant fragment corresponding to Human SOX3 aa 1-150.

Database link: P41225

Run BLAST with
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EpitopeBinds to an epitope located within the peptide sequence LISLPFPPDS as determined by

overlapping synthetic peptides.

Positive control WB: NTERA-2 cell lysate.

General notesThe 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°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.02% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), PBS

Purity Protein A purified

ClonalityMonoclonalClone numberCL4725

Isotype IgG1

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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 µg/ml. Predicted molecular weight: 45 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].

Defects in SOX3 are the cause of 46,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.

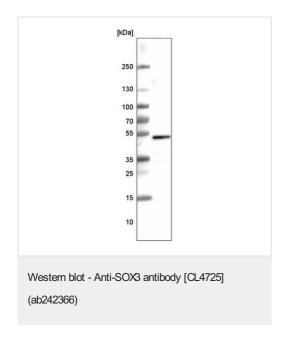
Sequence similarities

Cellular localization

Contains 1 HMG box DNA-binding domain.

Nucleus.

Images



Anti-SOX3 antibody [CL4725] (ab242366) at 1 μ g/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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