


Product datasheet

Anti-Oct4 antibody ab18976

★★★★☆ [16 Abreviews](#) [206 References](#) [1 Image](#)

Overview

Product name	Anti-Oct4 antibody
Description	Rabbit polyclonal to Oct4
Host species	Rabbit
Specificity	The antibody reacts with 45 kDa Oct4 (also designated Oct3A) and in a less extent 33 kDa Oct3B.
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Rat Predicted to work with: Mouse, Human, Chimpanzee 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>This product is manufactured by BioVision, an Abcam company and was previously called 3576 Oct-4 Antibody. 3576-100 is the same size as the 100 µg size of ab18976.</p> <p>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.</p> <p>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</p>

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. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Thimerosal (merthiolate) Constituents: 69% PBS, 30% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Purification notes	Affinity Purified
Clonality	Polyclonal
Isotype	IgG

Applications

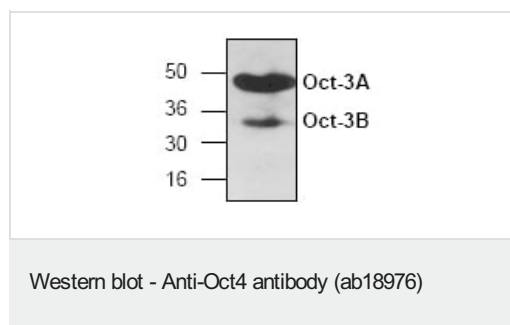
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab18976 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (5)	Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 45 kDa.

Target

Function	Transcription factor that binds to the octamer motif (5'-ATTTGCAT-3'). Forms a trimeric complex with SOX2 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206. Critical for early embryogenesis and for embryonic stem cell pluripotency.
Tissue specificity	Expressed in developing brain. Highest levels found in specific cell layers of the cortex, the olfactory bulb, the hippocampus and the cerebellum. Low levels of expression in adult tissues.
Sequence similarities	Belongs to the POU transcription factor family. Class-5 subfamily. Contains 1 homeobox DNA-binding domain. Contains 1 POU-specific domain.
Developmental stage	Highly expressed in undifferentiated embryonic stem cells and expression decreases gradually after embryoid body (EB) formation.
Domain	The POU-specific domain mediates interaction with PKM2.
Post-translational modifications	Sumoylation enhances the protein stability, DNA binding and transactivation activity. Sumoylation is required for enhanced YES1 expression. Ubiquitinated; undergoes 'Lys-63'-linked polyubiquitination by WWP2 leading to proteasomal degradation.
Cellular localization	Nucleus. Expressed in a diffuse and slightly punctuate pattern.

Images



Anti-Oct4 antibody (ab18976) at 0.5 µg/ml + Lysates prepared from rat kidney tissue.

Predicted band size: 45 kDa

The antibody reacts with 45 kDa Oct4 (also designated Oct-3A) and in a less extent 33 kDa Oct-3B from human, mouse, and rat samples.

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

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