

## Product datasheet

# Anti-Oct4 antibody ab27985

★★★★☆ 10 Abreviews 43 References 4 图像

### 概述

<b>产品名称</b>	Anti-Oct4抗体
<b>描述</b>	山羊多克隆抗体to Oct4
<b>宿主</b>	Goat
<b>特异性</b>	According to the UniProt database Oct4 is mainly localized in the nucleus but can also occur in the cytoplasm: UniProtKB - Q01860
<b>经测试应用</b>	<b>适用于:</b> Flow Cyt, ICC/IF, WB
<b>种属反应性</b>	<b>与反应:</b> Mouse, Rat, Human
<b>免疫原</b>	Synthetic peptide corresponding to Human Oct4 aa 300 to the C-terminus (C terminal). (Peptide available as <a href="#">ab20650</a> )
<b>阳性对照</b>	Human or Mouse Embryonic Stem Cells

### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>存储溶液</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: 1% BSA  This product may contain up to 3% BSA depending on the batch. For specific batch formulations please contact us.
<b>纯度</b>	Protein G purified
<b>纯化说明</b>	Affinity Purified
<b>克隆</b>	多克隆
<b>同种型</b>	IgG

### 应用

Our [Abpromise guarantee](#) covers the use of **ab27985** in the following tested applications.

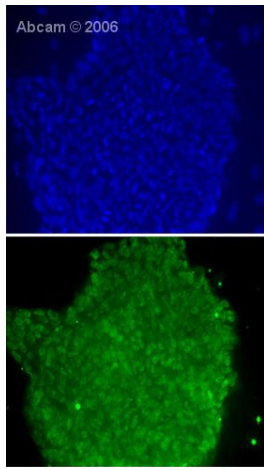
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
Flow Cyt	★★★★★	Use at an assay dependent concentration. <a href="#">ab37373</a> - Goat polyclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★☆	Use a concentration of 1 - 5 µg/ml.
WB	★★★★☆	Use a concentration of 1 µg/ml. Detects a band of approximately 45 kDa (predicted molecular weight: 39 kDa).

## 靶标

功能	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.
组织特异性	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.
序列相似性	Belongs to the POU transcription factor family. Class-5 subfamily. Contains 1 homeobox DNA-binding domain. Contains 1 POU-specific domain.
发展阶段	Highly expressed in undifferentiated embryonic stem cells and expression decreases gradually after embryoid body (EB) formation.
结构域	The POU-specific domain mediates interaction with PKM2.
翻译后修饰	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.
细胞定位	Nucleus. Expressed in a diffuse and slightly punctuate pattern.

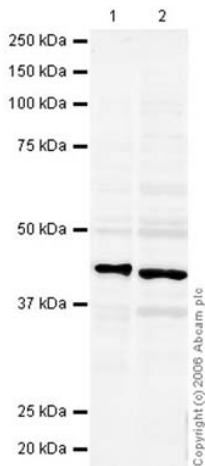
## 图片



Immunocytochemistry/ Immunofluorescence - Anti-Oct4 antibody (ab27985)

This image is courtesy of an Abreview submitted by Dr Maria Keramari

ab27985 recognizes Oct4 in human embryonic stem cells. The upper panel shows DAPI staining while the lower panel shows ab27985 staining.



Western blot - Anti-Oct4 antibody (ab27985)

**All lanes** : Anti-Oct4 antibody (ab27985) at 1  $\mu\text{g/ml}$

**Lane 1** : Human Embryonic Stem Cell Lysate

**Lane 2** : Mouse Embryonic Stem Cell Lysate

Lysates/proteins at 20  $\mu\text{g}$  per lane.

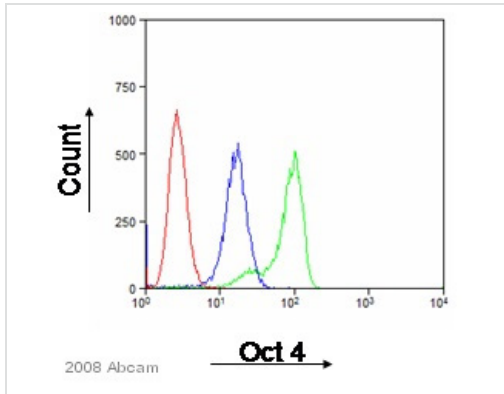
#### Secondary

**All lanes** : Goat IgG secondary antibody (ab28445) at 1/10000 dilution

**Predicted band size:** 39 kDa

**Observed band size:** 45 kDa

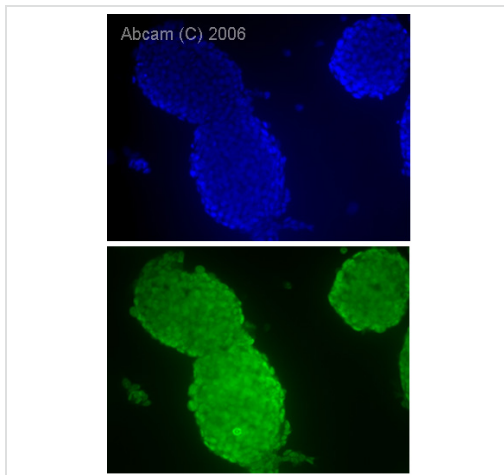
The antibody recognised a band corresponding to Oct4 in mouse and human embryonic stem cell lysates.



Flow Cytometry - Anti-Oct4 antibody (ab27985)

This image is courtesy of an Abreview submitted by Mr Mark Jones

ab27985 staining Oct4 in human embryonic carcinoma cells by Flow Cytometry. Cells were fixed in paraformaldehyde and permeabilized in saponin buffer. The primary antibody was diluted 1:500 (PBS + 10% BSA) and incubated with sample for 1 hour at 4°C. A FITC conjugated Donkey polyclonal to goat IgG, diluted 1:200 was used as secondary. The red histogram is secondary only control whilst green and blue represents Oct4 expression in untreated and partially differentiated with 10nM Trans-Retinoic acid for 14 days.



Immunocytochemistry/ Immunofluorescence - Anti-Oct4 antibody (ab27985)

This image is courtesy of an Abreview submitted by Dr Maria Keramari

ab27985 recognizes Oct4 in mouse embryonic stem cells. DAPI staining is shown in the top panel while ab27985 staining is shown in the lower panel.

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