

## Product datasheet

# Anti-Oct4 antibody [SEMGC] ab59545

3 References [画像数 2](#)

### 製品の概要

製品名	Anti-Oct4 antibody [SEMGC]
製品の詳細	Mouse monoclonal [SEMGC] to Oct4
由来種	Mouse
アプリケーション	<b>適用あり:</b> ICC/IF, IHC-P
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Oct-3/4
ポジティブ・コントロール	Seminoma This antibody gave a positive result in IF in the following Formaldehyde/Methanol fixed cell line: Mouse embryonic stem cells. This antibody gave a positive result in IHC in the following FFPE tissue: Human normal testis.

### 製品の特性

製品の状態	Prediluted
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.30 Preservative: 0.1% Sodium azide Constituent: 0.5% Tris buffered saline
ポリ/モノ	モノクローナル
クローン名	SEMGC
アイソタイプ	IgG2b

### アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab59545** in the following tested applications.

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

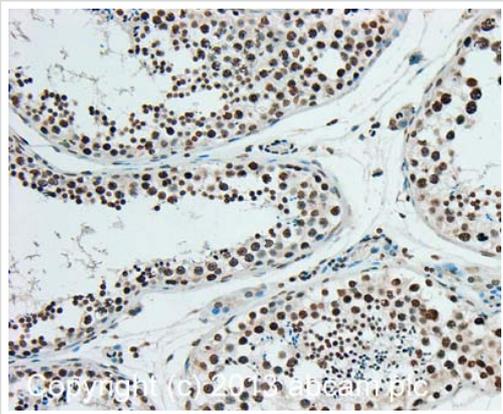
アプリケーション	Abreviews	特記事項
ICC/IF		1/1.

アプリケーション	Abreviews	特記事項
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

## ターゲット情報

機能	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.
組織特異性	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.
配列類似性	Belongs to the POU transcription factor family. Class-5 subfamily. Contains 1 homeobox DNA-binding domain. Contains 1 POU-specific domain.
発生段階	Highly expressed in undifferentiated embryonic stem cells and expression decreases gradually after embryoid body (EB) formation.
ドメイン	The POU-specific domain mediates interaction with PKM2.
翻訳後修飾	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.
細胞内局在	Nucleus. Expressed in a diffuse and slightly punctuate pattern.

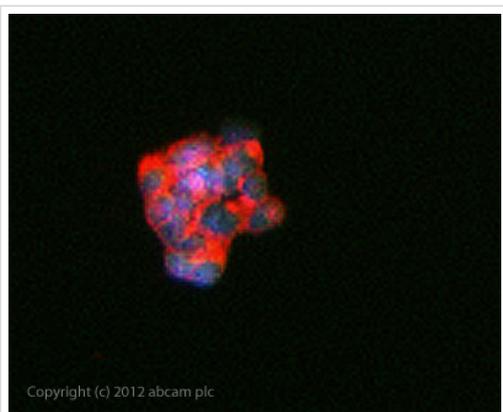
## 画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [SEMGC] (ab59545)

IHC image of Oct4 staining in Human normal testis formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab59545, undiluted, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunocytochemistry/ Immunofluorescence - Anti-Oct4 antibody [SEMGC] (ab59545)

ab59545 stained Mouse embryonic stem cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab59545 used Prediluted (Neat) overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti-mouse ([ab96879](#)) IgG (H+L) used at a 1:1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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