

Anti-Oct4 antibody [EPR2054] ab109183

重组 RabMAb

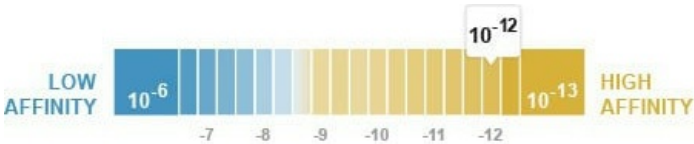
★★★★★ 1 Abreviews 39 References 16 图像

概述

产品名称	Anti-Oct4抗体[EPR2054]
描述	兔单克隆抗体[EPR2054] to Oct4
宿主	Rabbit
经测试应用	适用于: ChIC/CUT&RUN-seq, WB, IP, IHC-P 不适用于: ICC/IF
种属反应性	与反应: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: NCCIT and HeLa whole cell lysate (ab150035). IHC-P: Human seminoma and ovarian dysgerminoma tissue. IP: NCCIT whole cell lysate. ChIC/CUT&RUN-Seq: NCCIT cells.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

性能

形式	Liquid
存放说明	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.
解离常数 (K _D)	K _D = 5.00 x 10 ⁻¹² M



[Learn more about Kp](#)

存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR2054
同种型	IgG

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用ab109183于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

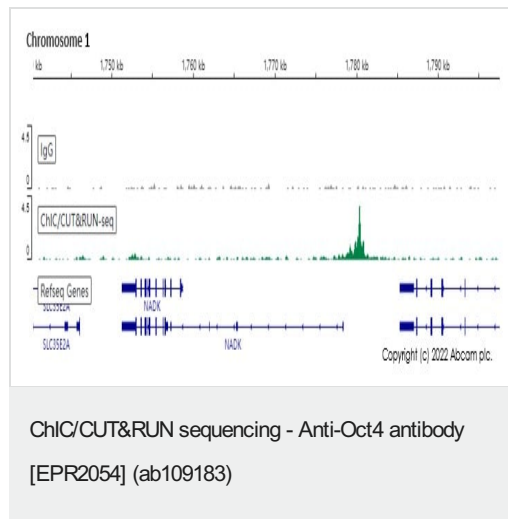
应用	Ab评论	说明
ChIC/CUT&RUN-seq		Use at an assay dependent concentration. 5 µg
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 39 kDa.
IP		1/10 - 1/100.
IHC-P		1/500 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .

应用说明 Is unsuitable for ICC/IF.

靶标

功能	Transcription factor that binds to the octamer motif (5'-ATTGTCAT-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.

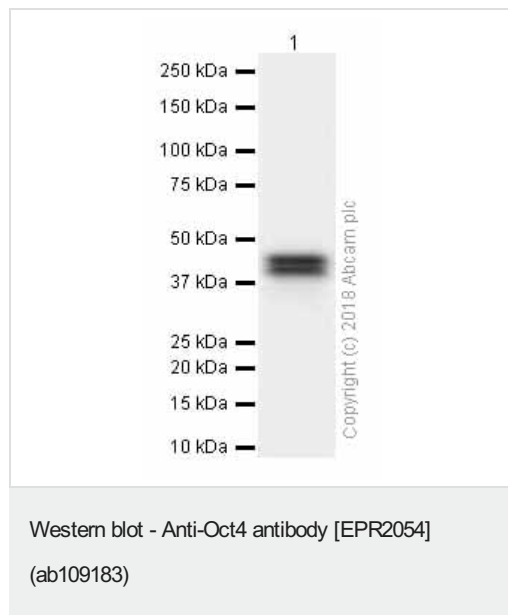
图片



ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/mL, 2×10^5 NCCIT (Human pluripotent embryonic carcinoma cell line) cells and 5 μ g of ab109183 [EPR2054]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown.

Additional screenshots of mapped reads can be downloaded [here](#).

The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



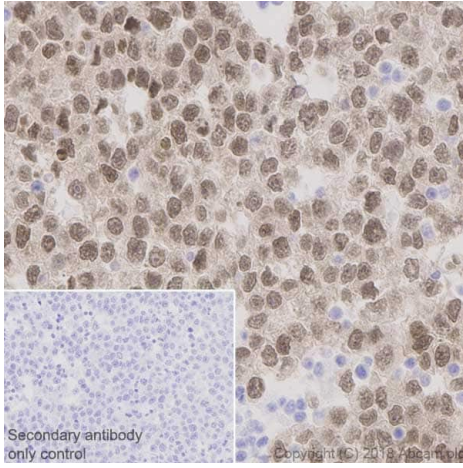
Anti-Oct4 antibody [EPR2054] (ab109183) at 0.06 μ g/ml (purified) + NCCIT (Human pluripotent embryonic carcinoma epithelial cell) whole cell lysates at 15 μ g

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

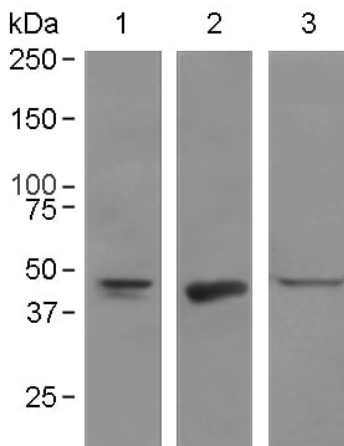
Predicted band size: 39 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human seminoma tissue sections labeling Oct4 - with Purified ab109183 at 1:600 dilution (1 µg/ml). Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0) ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain



Western blot - Anti-Oct4 antibody [EPR2054] (ab109183)

All lanes : Anti-Oct4 antibody [EPR2054] (ab109183) at 1/1000 dilution (Unpurified)

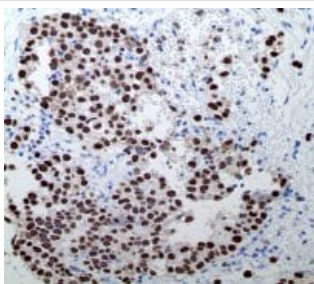
Lane 1 : Seminoma lysate

Lane 2 : NCCIT cell lysate

Lane 3 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

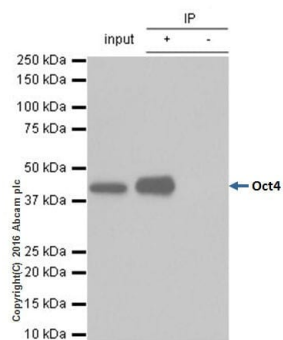
Predicted band size: 39 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Unpurified ab109183, at 1:500 dilution, staining Oct4 in paraffin-embedded Human ovarian dysgerminoma by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Oct4 antibody [EPR2054]
(ab109183)

Unpurified ab109183 at 1/50 immunoprecipitating Oct4 in NCCIT (human pluripotent embryonal carcinoma) whole cell lysate observed at 39 KDa (lanes 1 and 2).

Lane 1 (input): NCCIT whole cell lysate, 10µg

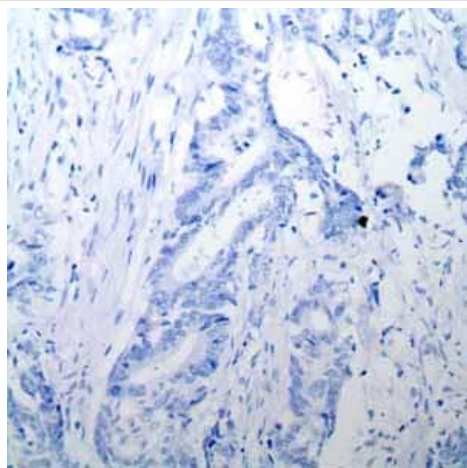
Lane 2 (+): ab109183 + NCCIT whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab109183 in NCCIT whole cell lysate

For western blotting, ab109183 at 1/1000 dilution and VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10,000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

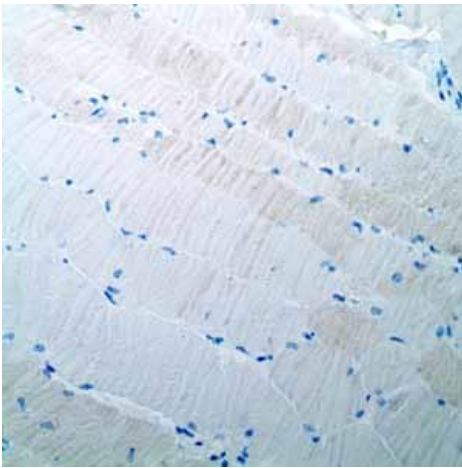
Diluting buffer and concentration: 5% NFDM /TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
(ab109183)

Unpurified ab109183 showing negative staining in Colonic adenocarcinoma tissue.

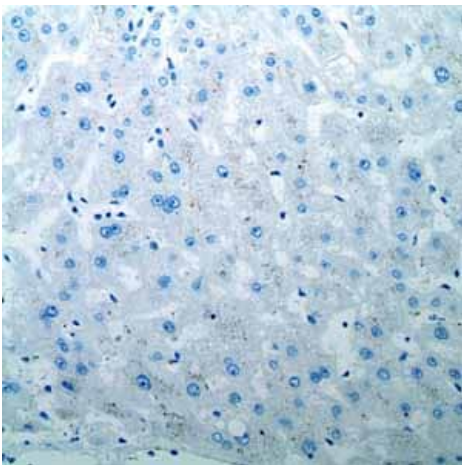
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Unpurified ab109183 showing negative staining in Skeletal muscle tissue.

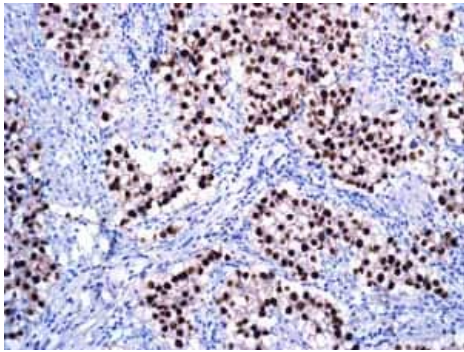
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Unpurified ab109183 showing negative staining in Normal liver tissue.

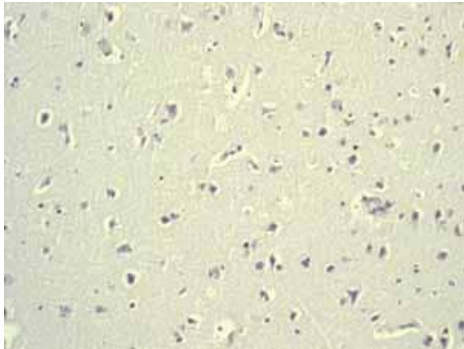
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Unpurified ab109183 showing positive staining in Seminoma tissue.

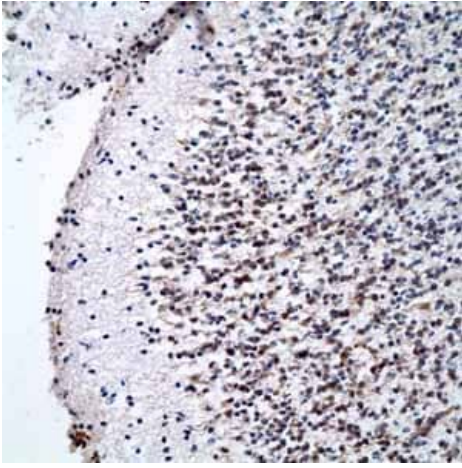
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Unpurified ab109183 showing negative staining in Normal brain tissue.

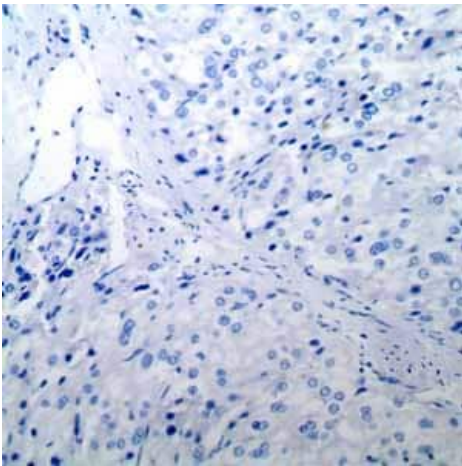
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Unpurified ab109183 showing positive staining in Fetal brain tissue.

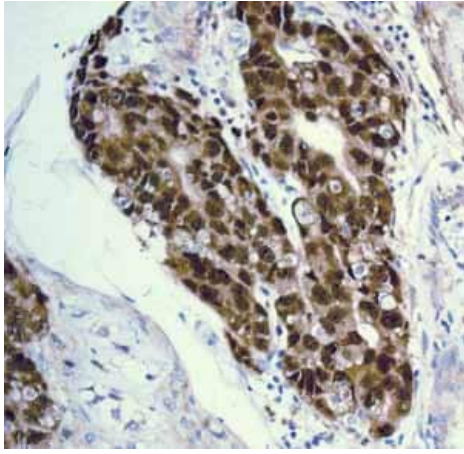
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Unpurified ab109183 showing negative staining in Hepatocellular carcinoma tissue.

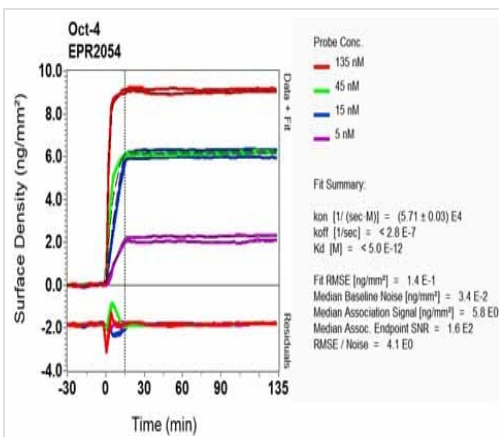
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054] (ab109183)

Unpurified ab109183 showing positive staining in Embryonal carcinoma tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



OI-RD Scanning - Anti-Oct4 antibody [EPR2054] (ab109183)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



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Recombinant technology



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Animal-free production

Anti-Oct4 antibody [EPR2054] (ab109183)

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