

Anti-Oct4 antibody [EPR2054] - BSA and Azide free ab222233

リコンビナント **RabMAb**

4 References [画像数 14](#)

製品の概要

製品名	Anti-Oct4 antibody [EPR2054] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR2054] to Oct4 - BSA and Azide free
由来種	Rabbit
アプリケーション	適用あり: IP, WB, IHC-P, ChIC/CUT&RUN-seq 適用なし: ICC/IF
種交差性	交差種: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	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.
特記事項	<p>ab222233 is the carrier-free version of ab109183.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <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</p>

these species. Please contact us for more information.

製品の特性

製品の状態

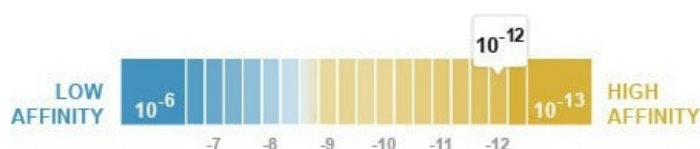
Liquid

保存方法

Shipped at 4°C. Store at +4°C. Do Not Freeze.

解離定数 (K_D 値)

$K_D = 5.00 \times 10^{-12}$ M



[Learn more about \$K_D\$](#)

バッファー

pH: 7.20

Constituent: PBS

キャリア・フリー

はい

精製度

Protein A purified

ポリ/モノ

モノクローナル

クローン名

EPR2054

アイソタイプ

IgG

アプリケーション

The Abpromise guarantee

Abpromise保証は、次のテスト済みアプリケーションにおけるab222233の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 39 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ChIC/CUT&RUN-seq		Use at an assay dependent concentration.

追加情報

Is unsuitable for ICC/IF.

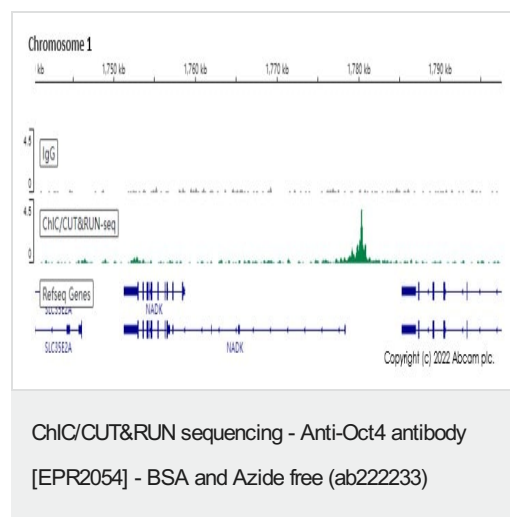
ターゲット情報

機能

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.

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

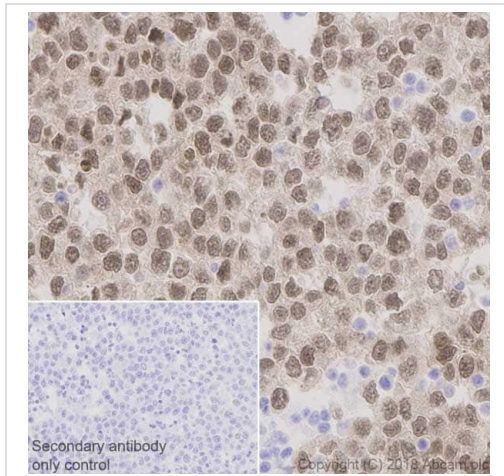


ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/mL, 2×10^5 NCCIT (Human pluripotent embryonic carcinoma cell line) cells and 5 μ g of [ab109183](#) [EPR2054]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG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

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

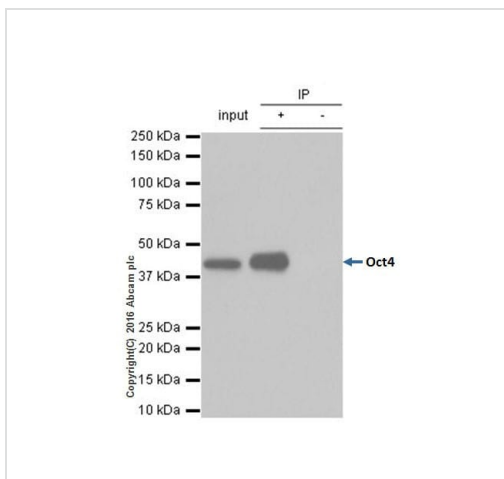
The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab109183](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

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. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).



Immunoprecipitation - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

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

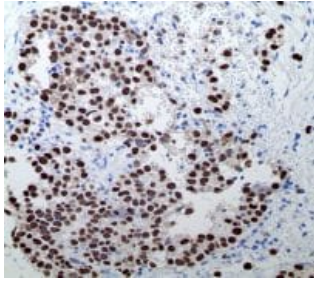
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab109183** in NCCIT whole cell lysate

For western blotting, **ab109183** at 1/1000 dilution and **ab131366** VeriBlot for IP (HRP) was used for detection antibody at 1/10000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

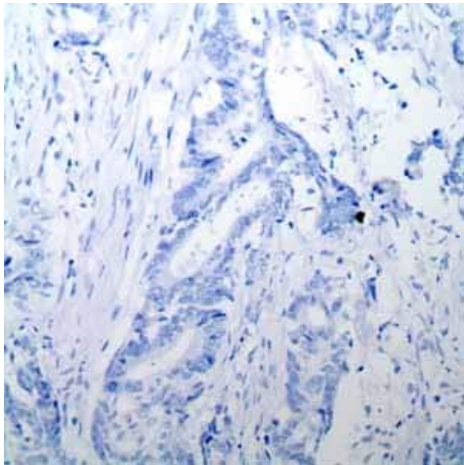


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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

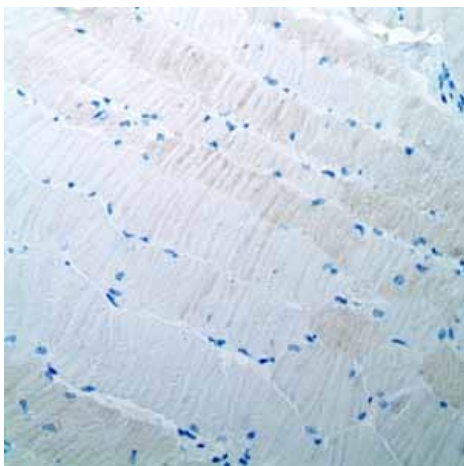


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

Unpurified **ab109183** showing negative staining in Colonic adenocarcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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

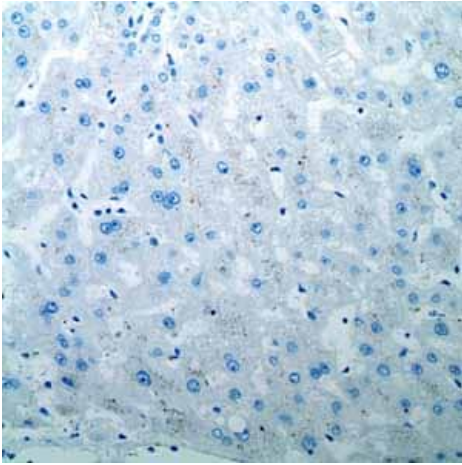


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

Unpurified **ab109183** showing negative staining in Skeletal muscle tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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

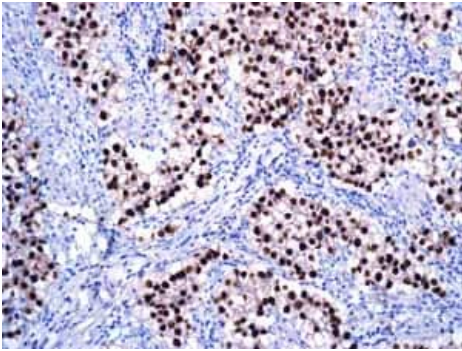


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

Unpurified **ab109183** showing negative staining in Normal liver tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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

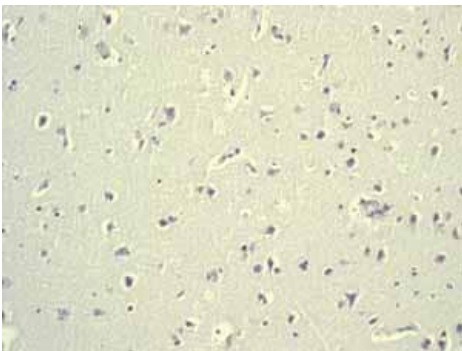


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

Unpurified **ab109183** showing positive staining in Seminoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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

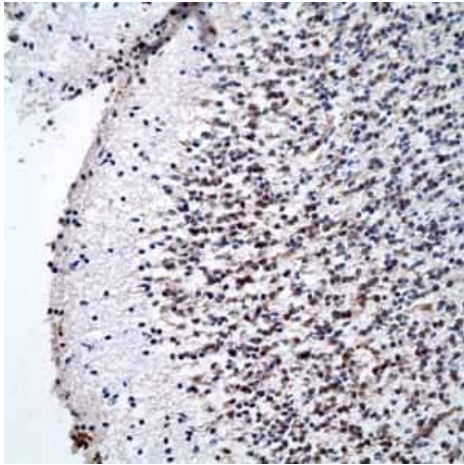


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

Unpurified **ab109183** showing negative staining in Normal brain tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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

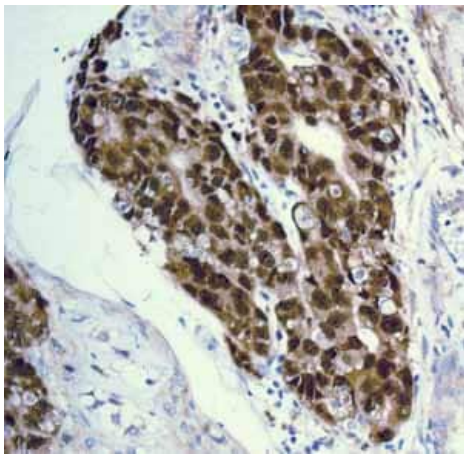


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

Unpurified **ab109183** showing positive staining in Fetal brain tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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

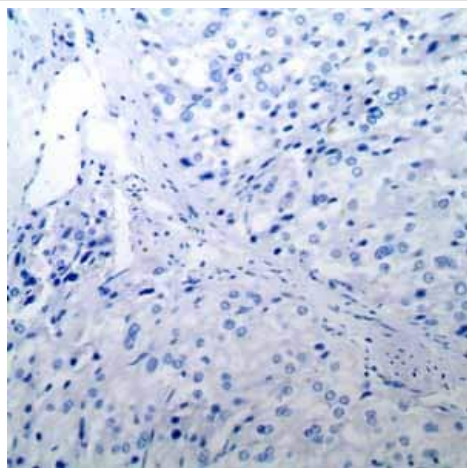


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

Unpurified **ab109183** showing positive staining in Embryonal carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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

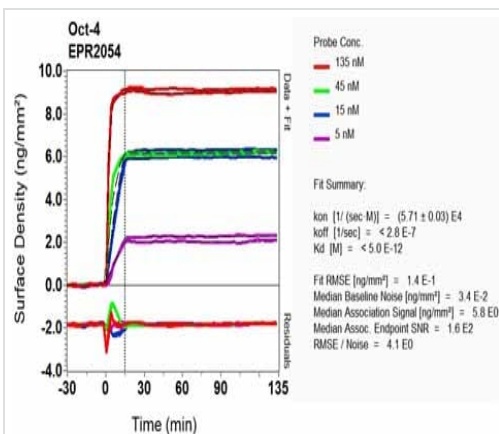


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Oct4 antibody [EPR2054]
- BSA and Azide free (ab222233)

Unpurified **ab109183** showing negative staining in Hepatocellular carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

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



Oct-4 SPR sensorgram - Anti-Oct4 antibody [EPR2054] -
BSA and Azide free (ab222233)

Equilibrium dissociation constant (K_D)

Learn more about K_D

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109183**).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



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Recombinant technology



Success from the first experiment
Confirmed specificity



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Animal-free production

Anti-Oct4 antibody [EPR2054] - BSA and Azide free (ab222233)

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