abcam

Product datasheet

Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free ab167610

重组 RabMAb

★★★★★ 2 Abreviews 17 图像

概述

产品名称	Anti-Estrogen Receptor alpha抗体[EPR4097] - BSA and Azide free
描述	兔单克隆抗体[EPR4097] to Estrogen Receptor alpha - BSA and Azide free
宿主	Rabbit
特异性	Expression levels of ER alpha protein vary with sample type.
经测试应用	**适用于:** Flow Cyt (Intra), ChIC/CUT&RUN-seq, IHC-P, WB, IHC-Fr, ICC/IF
种属反应性	**与反应:** Human
免疫原	Recombinant fragment corresponding to Estrogen Receptor alpha aa 1-300.
阳性对照	WB: MCF7 and T47-D cell lysates. IHC-P: Human breast ductal infiltrating carcinoma and normal breast tissues. ICC/IF: MCF-7 cells. IHC-Fr : Frozen human cervix and uterus tissue sections.
常规说明	ab167610 is the carrier-free version of **ab108398**. 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. 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. 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. 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. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid

存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	Constituent: PBS
无载体	**是**
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR4097
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab167610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。

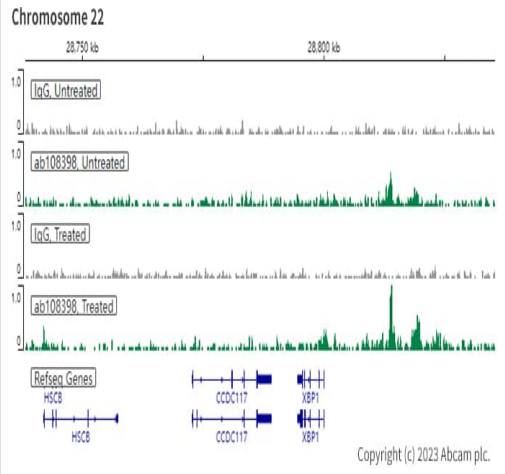
应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ChIC/CUT&RUN-seq		Use at an assay dependent concentration.
IHC-P	★★★★☆ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
WB		Use at an assay dependent concentration. Predicted molecular weight: 66 kDa.
IHC-Fr		Use at an assay dependent concentration.
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.

靶标

功能	Nuclear hormone receptor. The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Can activate the transcriptional activity of TFF1.
序列相似性	Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain.
结构域	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.
翻译后修饰	Phosphorylated by cyclin A/CDK2. Phosphorylation probably enhances transcriptional activity. Glycosylated; contains N-acetylglucosamine, probably O-linked. Ubiquitinated. Deubiquitinated by OTUB1. Dimethylated by PRMT1 at Arg-260. The methylation may favor cytoplasmic localization. Palmitoylated (isoform 3). Not biotinylated (isoform 3).

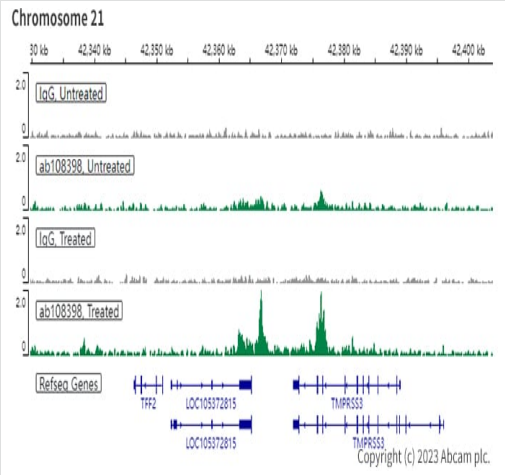
细胞定位	Nucleus. Cytoplasm. Cell membrane. A minor fraction is associated with the inner membrane and Nucleus. Cytoplasm. Cell membrane. Associated with the inner membrane via palmitoylation.

图片



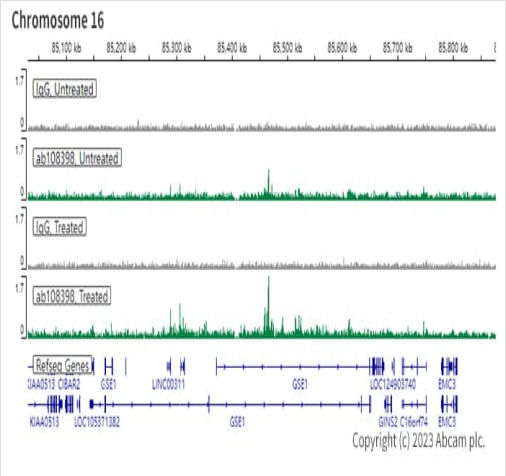
ChIC/CUT&RUN sequencing - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

This data was developed using the same antibody clone in a different buffer formulation (**ab108398**).
ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/µL, 2.5 x 10^5 MCF7 (Human breast adenocarcinoma epithelial cell) cells treated with phenol red free medium and 5% charcoal stripped FBS for 3 days than treated with β-estradiol (10 nM 45 min) and 5 µg of **ab108398** [EPR4097]. 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. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



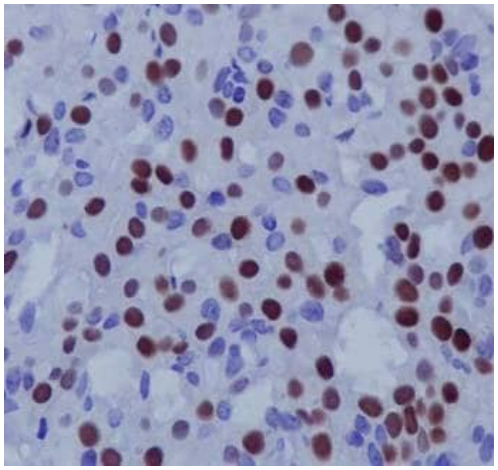
ChIC/CUT&RUN sequencing - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

This data was developed using the same antibody clone in a different buffer formulation (**ab108398**).
ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/µL, 2.5 x 10^5 MCF7 (Human breast adenocarcinoma epithelial cell) cells treated with phenol red free medium and 5% charcoal stripped FBS for 3 days than treated with β-estradiol (10 nM 45 min) and 5 µg of **ab108398** [EPR4097]. 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. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



ChIC/CUT&RUN sequencing - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

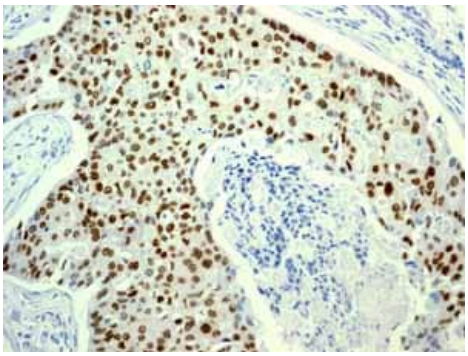
This data was developed using the same antibody clone in a different buffer formulation (**ab108398**).
ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/µL, 2.5 x 10^5 MCF7 (Human breast adenocarcinoma epithelial cell) cells treated with phenol red free medium and 5% charcoal stripped FBS for 3 days than treated with β-estradiol (10 nM 45 min) and 5 µg of **ab108398** [EPR4097]. 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. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast tissue labelling Estrogen Receptor alpha with purified **ab108398** at 1/250. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with Hematoxylin.

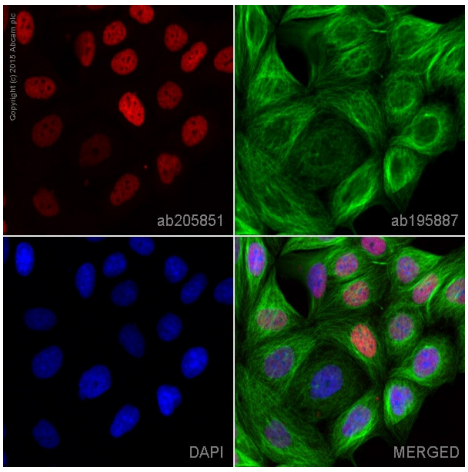
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast ductal infiltrating carcinoma tissue labelling Estrogen Receptor alpha with unpurified **ab108398**.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



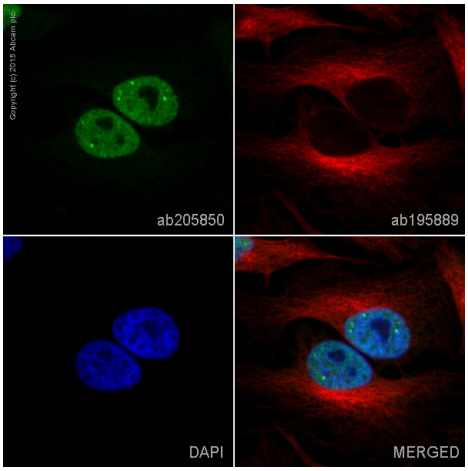
Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Clone EPR4097 (ab167610) has been successfully conjugated by Abcam. This image was generated using Anti-Estrogen Receptor alpha antibody [EPR4097] (Alexa Fluor® 647). Please refer to **ab205851** for protocol details.

ab205851 staining Estrogen Receptor alpha in MCF7 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with **ab205851** at a 1/50 dilution (shown in red) and **ab195887**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in MCF7 cells fixed with 100% methanol (5 min)

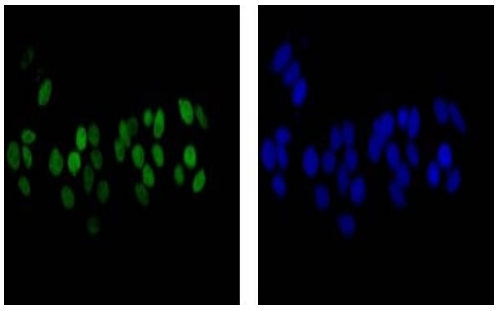


Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Clone EPR4097 (ab167610) has been successfully conjugated by Abcam. This image was generated using Anti-Estrogen Receptor alpha antibody [EPR4097] (Alexa Fluor® 488). Please refer to **ab205850** for protocol details.

ab205850 staining Estrogen Receptor alpha in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with **ab205850** at 1/100 dilution (shown in green) and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

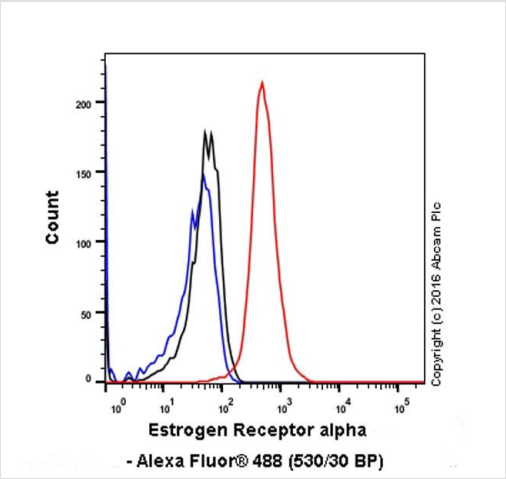
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Immunocytochemsitry/Immunofluorescence analysis of MCF-7 cells labelling Estrogen Receptor alpha (green) with purified **ab108398** at 1/200. Cells were fixed with 4% paraformaldehyde. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/200) was used as the secondary antibody. Counterstained with DAPI (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



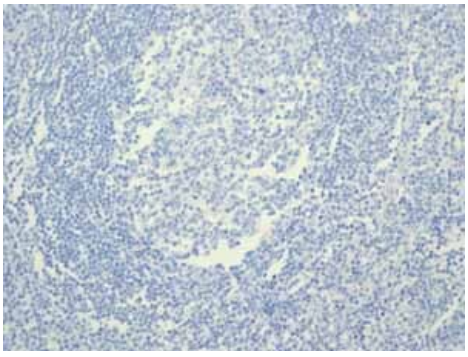
Flow Cytometry (Intracellular) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

ab108398 staining Estrogen Receptor alpha in the human cell line MCF-7 (human breast carcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde, permeabilized with 90% methanol and the sample was incubated with the primary antibody at a dilution of 1/20. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

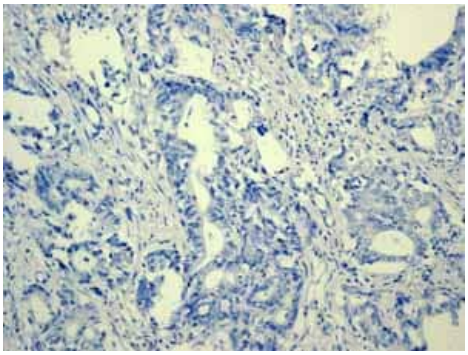
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of human normal tonsil tissue. Unpurified **ab108398** shows negative staining.

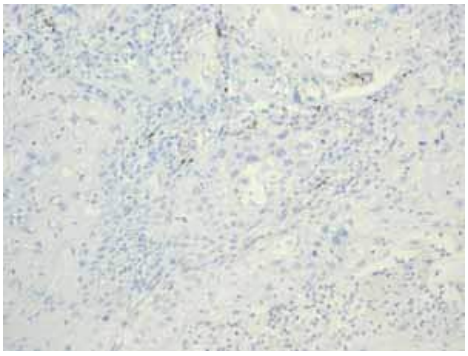
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of human colonic adenocarcinoma tissue. Unpurified **ab108398** shows negative staining.

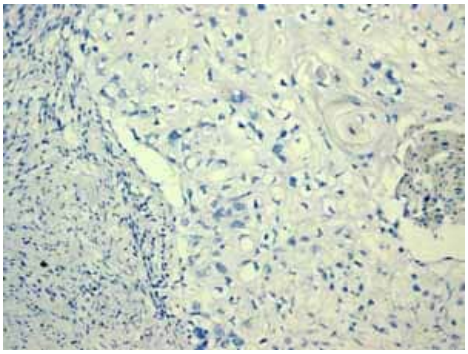
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of human lung adenocarcinoma tissue. Unpurified **ab108398** shows negative staining.

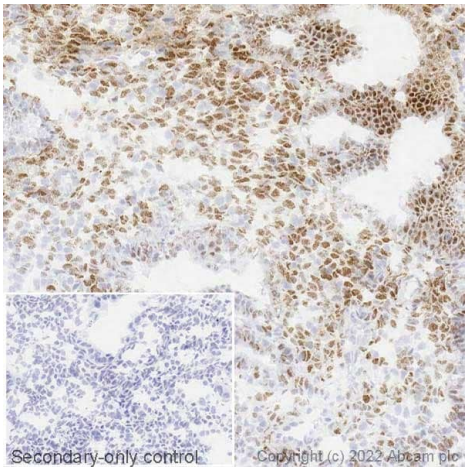
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of human cervical carcinoma tissue. Unpurified **ab108398** shows negative staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



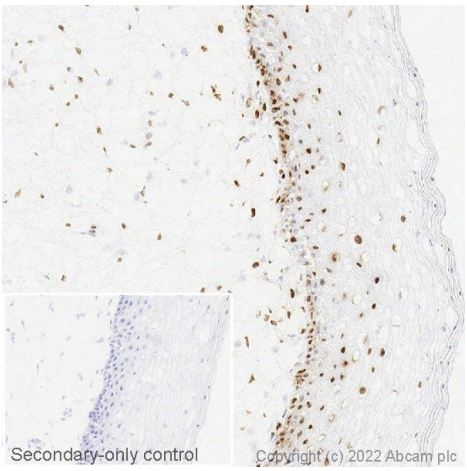
Immunohistochemistry (Frozen sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

IHC image of Estrogen Receptor alpha staining in a section of frozen human uterus* performed on a Leica Biosystems BOND® RX instrumen using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with **ab108398**, 5 ug/ml, 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. The inset secondary-only control image is taken from an identical assay without primary antibody.

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.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



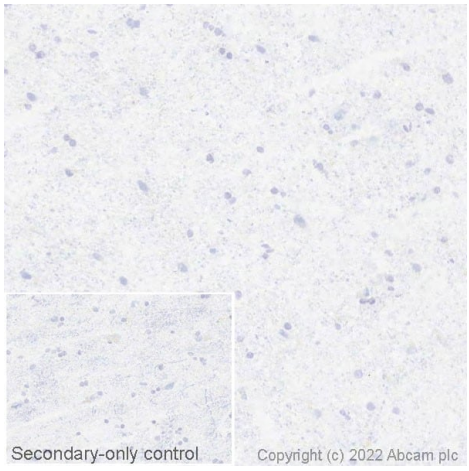
Immunohistochemistry (Frozen sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

IHC image of Estrogen Receptor alpha staining in a section of frozen human cervix* performed on a Leica Biosystems BOND® RX instrumen using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with **ab108398**, 5 ug/ml, 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. The inset secondary-only control image is taken from an identical assay without primary antibody.

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.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



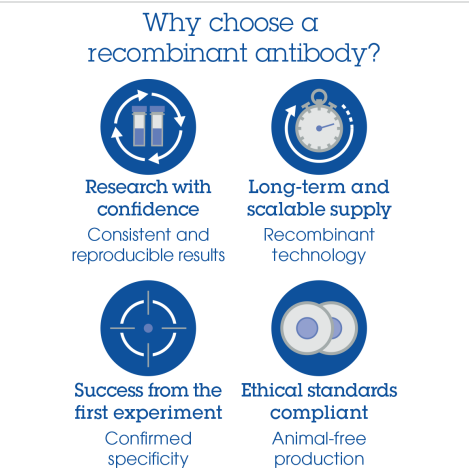
Immunohistochemistry (Frozen sections) - Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Negative control image: IHC image of Estrogen Receptor alpha staining in a section of frozen human hippocampus* performed on a Leica Biosystems BOND® RX instrumen using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with **ab108398**, 5 ug/ml, 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. The inset secondary-only control image is taken from an identical assay without primary antibody.

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.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108398**).



Anti-Estrogen Receptor alpha antibody [EPR4097] - BSA and Azide free (ab167610)

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.cn/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors