# abcam

## Product datasheet

# Anti-Estrogen Receptor alpha antibody [CRET94D] ab241557

Recombinant

## 2 References 3 Images

Overview

Product name Anti-Estrogen Receptor alpha antibody [CRET94D]

**Description**Mouse monoclonal [CRET94D] to Estrogen Receptor alpha

Host species Mouse

**Tested applications** Suitable for: IHC-P, WB

Species reactivity Reacts with: Mouse, Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

**Positive control** WB: Human breast cancer tissue, mouse breast tissue and mouse ovary tissue lysates. IHC:

Human breast carcinoma and mouse breast tissue.

**General notes**This product has switched from a hybridoma to recombinant production method on 07<sup>th</sup>

December 2020.

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

#### **Properties**

Form Liquid

**Storage instructions** 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.

**Storage buffer** Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

**Clonality** Monoclonal

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Clone number CRET94D

Isotype lgG1 Light chain type kappa

#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab241557 in the following tested applications.

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

Application	Abreviews	Notes
IHC-P		1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 66 kDa.

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**Function** 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.

Sequence similarities Belongs to the nuclear hormone receptor family. NR3 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

**Domain** Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-

terminal ligand-binding domain.

Post-translational

modifications

Phosphorylated by cyclin A/CDK2. Phosphorylation probably enhances transcriptional activity.

Glycosylated; contains N-acetylglucosamine, probably O-linked.

Ubiquitinated. Deubiquitinated by OTUB1.

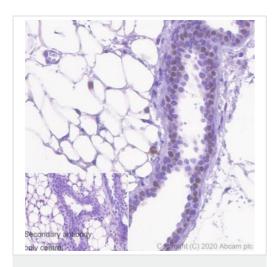
Dimethylated by PRMT1 at Arg-260. The methylation may favor cytoplasmic localization.

Palmitoylated (isoform 3). Not biotinylated (isoform 3).

**Cellular localization** Nucleus. Cytoplasm. Cell membrane. A minor fraction is associated with the inner membrane and

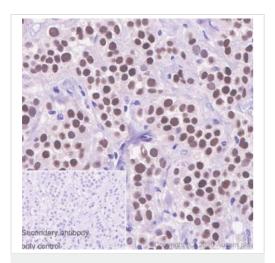
Nucleus. Cytoplasm. Cell membrane. Associated with the inner membrane via palmitoylation.

# **Images**



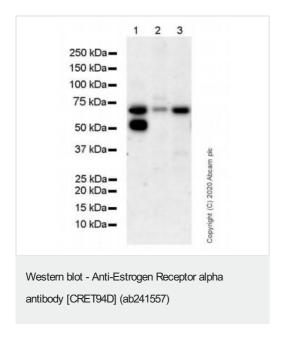
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Estrogen Receptor alpha antibody [CRET94D] (ab241557)

Immunohistochemical analysis of paraffin-embedded mouse breast labeling Estrogen Receptor with <u>ab252794</u> at 1/1000 dilution followed by LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with <u>ab252794</u> for 30 mins at room temperature and blocking mouse IgG by specific antibody (<u>ab133469</u>, 1:5000) for 8 mins. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylinFor 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.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Estrogen Receptor alpha antibody [CRET94D] (ab241557)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma and mouse breast tissues labeling Estrogen Receptor with <u>ab252794</u> at 1/1000 dilution followed by LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with <u>ab252794</u> for 30 mins at room temperature and blocking mouse lgG by specific antibody (<u>ab133469</u>, 1:5000) for 8 mins. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylinFor 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.



**All lanes :** Anti-Estrogen Receptor alpha antibody [CRET94D] (ab241557) at 1/1000 dilution

Lane 1: Human breast cancer tissue lysates

Lane 2 : Mouse breast tissue lysates

Lane 3 : Mouse ovary tissue lysates

Lysates/proteins at 20 µg per lane.

#### Secondary

All lanes: Anti-mouse IgG for IP (HRP) (ab131368)

Predicted band size: 66 kDa
Observed band size: 66 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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