

Product datasheet

Anti-Estrogen Receptor alpha antibody ab31315

3 Images

Overview

Product name	Anti-Estrogen Receptor alpha antibody
Description	Rabbit polyclonal to Estrogen Receptor alpha
Tested applications	Suitable for: ICC/IF, ELISA, WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic non phosphopeptide derived from human Estrogen Receptor alpha around the phosphorylation site of Serine 167

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.02% Sodium Azide Constituents: 50% Glycerol, PBS, 150mM Sodium chloride, pH 7.4
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab31315** 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
ICC/IF		Use a concentration of 1 µg/ml.
ELISA		1/20000.
WB		1/500 - 1/1000. Predicted molecular weight: 68 kDa.
IHC-P		Use at an assay dependent concentration.

Target

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.

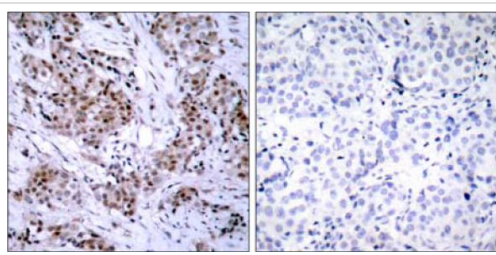
Post-translational modifications

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

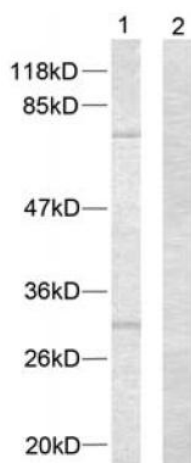
Nucleus. Cytoplasm. Cell membrane. A minor fraction is associated with the inner membrane and Nucleus. Cytoplasm. Cell membrane. Associated with the inner membrane via palmitoylation.

Images



Immunohistochemistry (Paraffin-embedded sections)
- Estrogen Receptor alpha antibody (ab31315)

ab31315 at a 1/100 dilution, staining human Estrogen Receptor alpha in paraffin embedded breast carcinoma. Left: Untreated, Right: Treated with synthesized immunogen peptide.



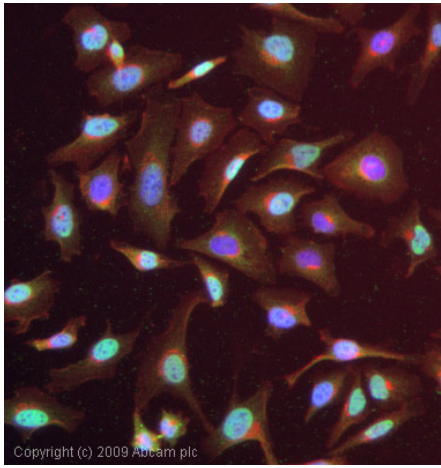
Western blot - Estrogen Receptor alpha antibody
(ab31315)

All lanes : Anti-Estrogen Receptor alpha antibody (ab31315) at 1/1000 dilution

Lane 1 : HeLa cells treated with EGF

Lane 2 : HeLa cells treated with EGF with preincubated with synthesized immunogen peptide

Predicted band size : 68 kDa



Immunocytochemistry/ Immunofluorescence -
Estrogen Receptor alpha antibody (ab31315)

ICC/IF image of ab31315 stained HeLa cells. The cells were 4% PFA 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 (ab31315, 1 μ g/ml) overnight at +4 \circ C. The secondary antibody (green) was Alexa Fluor $\text{\textcircled{R}}$ 488 goat anti-goat IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor $\text{\textcircled{R}}$ 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 1.43 μ M.

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

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 <http://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

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