


Product datasheet

Anti-Estrogen Receptor alpha antibody ab3575

★★★★☆ 1 Abreviews 5 References 5 Images

Overview

| | |
|----------------------------|---|
| Product name | Anti-Estrogen Receptor alpha antibody |
| Description | Rabbit polyclonal to Estrogen Receptor alpha |
| Tested applications | Suitable for: ICC/IF, WB, Flow Cyt, ICC, IHC-P |
| Species reactivity | Reacts with: Mouse, Rat, Human, Pig, Deer Predicted to work with: Hamster, Cow, Cat  |
| Immunogen | Synthetic peptide corresponding to Human Estrogen Receptor alpha aa 21-32. Sequence: NELEPLNRPQLK Database link: P03372 (Peptide available as ab5847) Run BLAST with Run BLAST with |
| Positive control | ICC: Human coronary artery smooth muscle cells (See Han et al). IHC-P: Rat prostate tissue. ICC/IF: T-47D cells. This antibody gave a positive result in IHC in the following FFPE tissue: Human breast ductal carcinoma This antibody gave a positive result when used in the following formaldehyde fixed cell lines: HepG2. |

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 or -80°C. Avoid freeze / thaw cycle. |
| Storage buffer | Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS |
| Purity | Immunogen affinity purified |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

Our [Abpromise guarantee](#) covers the use of **ab3575** in the following tested applications.

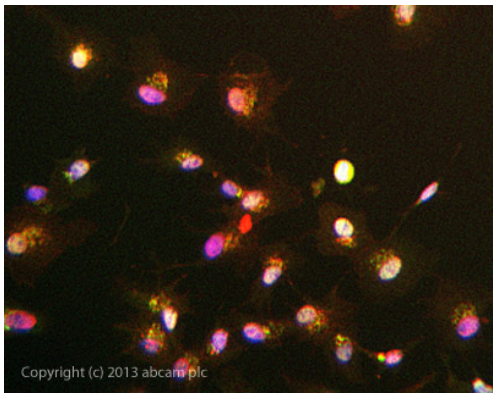
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|---|
| ICC/IF | | Use a concentration of 0.5 mg/ml. |
| WB | | Use a concentration of 1 µg/ml. Detects a band of approximately 64 kDa (predicted molecular weight: 68 kDa). Can be blocked with Human Estrogen Receptor alpha peptide (ab5847) . |
| Flow Cyt | | Use at an assay dependent concentration. PubMed: 23768049 |
| ICC | | Use at an assay dependent concentration. |
| IHC-P | ★★★★☆ | Use a concentration of 1 - 5 µg/ml. |

Target

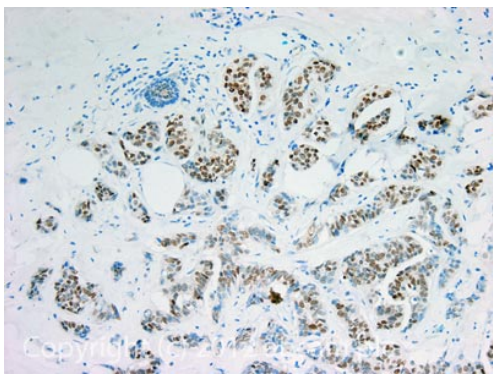
| | |
|---|---|
| Function | Nuclear hormone receptor. The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Can activate the transcriptional activity of TFF1. |
| Sequence similarities | 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



Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha antibody (ab3575)

ab3575 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 minutes) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab3575 at 5 µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti-rabbit (ab96899) IgG (H+L) used at a 1/250 dilution for 1 hour. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1 hour. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody (ab3575)

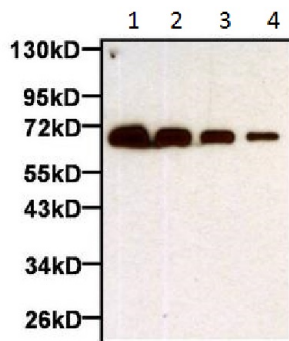
IHC image of Estrogen Receptor alpha staining in human breast ductal carcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6, epitope retrieval solution 1) for 20 minutes. The section was then incubated with ab3575, 5 µg/ml, for 15 minutes 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.

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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody (ab3575)

ab3575 at a dilution of 5 µg/ml staining ER alpha in rat prostate tissue sections.



Western blot - Anti-Estrogen Receptor alpha antibody (ab3575)

All lanes : Anti-Estrogen Receptor alpha antibody (ab3575) at 1/1000 dilution

Lane 1 : Recombinant full-length human Estrogen Receptor alpha protein, 250 ng

Lane 2 : Recombinant full-length human Estrogen Receptor alpha protein, 125 ng

Lane 3 : Recombinant full-length human Estrogen Receptor alpha protein, 62.5 ng

Lane 4 : Recombinant full-length human Estrogen Receptor alpha protein, 31.25 ng

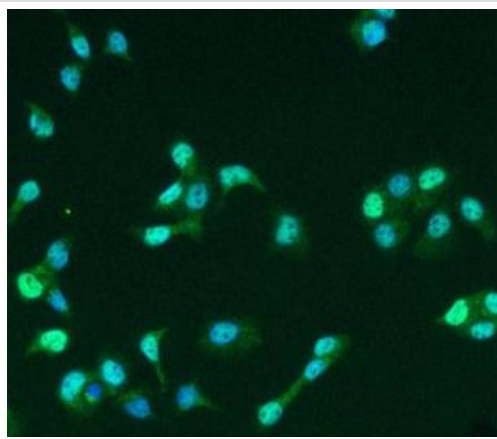
Secondary

HRP-conjugated goat anti-rabbit IgG at 1/40000 dilution

Developed using the ECL technique

Predicted band size : 68 kDa

Blocked with 5% milk in TBST for at least 1 hour at room temperature.



Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha antibody (ab3575)

4% paraformaldehyde fixed 0.1% Triton permeabilized T-47D (human ductal breast epithelial tumor cell line) cells stained for Estrogen Receptor alpha (green) using ab3575 (1/2000) in ICC/IF. DyLight 488-conjugated goat anti-rabbit IgG at 1/500.

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