

## Product datasheet

# Anti-Estrogen Receptor alpha antibody [EPR703(2)] ab79413

Recombinant RabMAb

★★★★☆ 7 Abreviews 4 References 5 Images

### Overview

<b>Product name</b>	Anti-Estrogen Receptor alpha antibody [EPR703(2)]
<b>Description</b>	Rabbit monoclonal [EPR703(2)] to Estrogen Receptor alpha
<b>Host species</b>	Rabbit
<b>Specificity</b>	Expression levels of ER alpha protein vary with sample type.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Baboon
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	MCF-7 cell lysate. Human breast carcinoma tissue.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .  Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

	supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR703(2)
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab79413 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

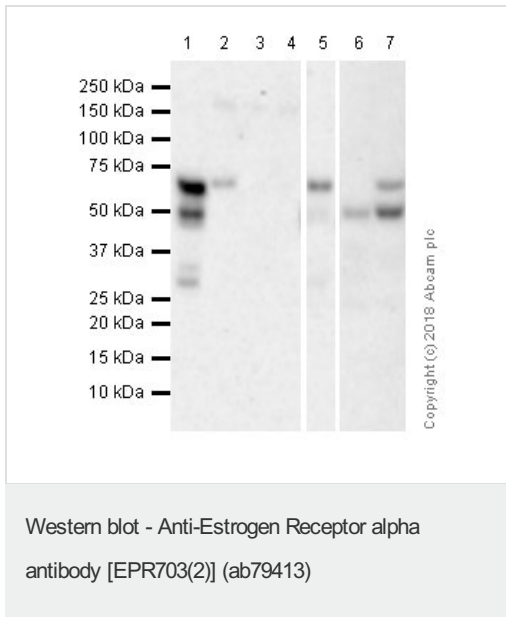
Application	Abreviews	Notes
<b>WB</b>		1/500 - 1/1000. Detects a band of approximately 66 kDa (predicted molecular weight: 68 kDa).
<b>IHC-P</b>	★★★★★ (7)	1/500 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt, ICC or IP.

## Target

<b>Function</b>	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.
<b>Sequence similarities</b>	Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain.
<b>Domain</b>	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.
<b>Post-translational modifications</b>	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).
<b>Cellular localization</b>	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



**All lanes** : Anti-Estrogen Receptor alpha antibody [EPR703(2)] (ab79413) at 1/2000 dilution

**Lane 1** : MCF7 (Human breast adenocarcinoma epithelial cell). Whole cell lysates

**Lane 2** : T-47D (human mammary gland ductal carcinoma epithelial cell). Whole cell lysates

**Lane 3** : MDA-MB231 (Human breast adenocarcinoma epithelial cell) Whole cell lysates (Negative control)

**Lane 4** : HepG2 (Human hepatocellular carcinoma epithelial cell) Whole cell lysates (Negative control)

**Lane 5** : Human uterus whole tissue lysate

**Lane 6** : Human ovary whole tissue lysate

**Lane 7** : Human ovary cancer whole tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

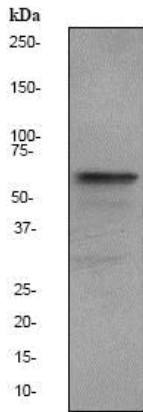
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 68 kDa

**Observed band size:** 68 kDa

**Exposure time:** 3 minutes

Blocking and diluting buffer: 5% NFDm/TBST



Western blot - Anti-Estrogen Receptor alpha antibody [EPR703(2)] (ab79413)

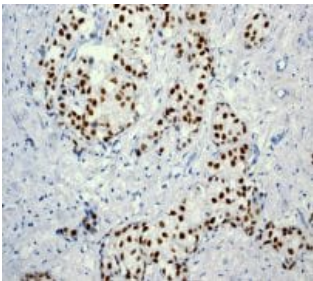
Anti-Estrogen Receptor alpha antibody [EPR703(2)] (ab79413) at 1/1000 dilution + MCF-7 cell lysate at 10 µg

**Secondary**

HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 68 kDa

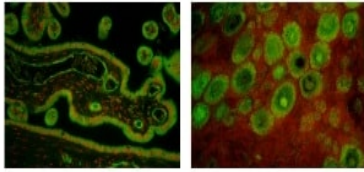
**Observed band size:** 66 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody [EPR703(2)] (ab79413)

ab79413, at 1/500 dilution, staining Estrogen Receptor alpha in paraffin-embedded human breast carcinoma tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Estrogen Receptor alpha antibody [EPR703(2)] (ab79413)

This image is courtesy of an Abreview submitted by Marcia Burch

ab79413 staining Estrogen Receptor alpha in Baboon placenta and fetal ovary tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 5% serum for 30 minutes at 22°C; antigen retrieval was by heat mediation in 10mM sodium citrate, pH 6.0. Samples were incubated with primary antibody (1/500 in PBS + 5% normal goat serum) for 16 hours at 4°C. A Biotin-conjugated goat anti-rabbit IgG polyclonal (7µg/ml) was used as the secondary antibody.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Estrogen Receptor alpha antibody [EPR703(2)] (ab79413)

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

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