abcam

Product datasheet

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



★★★★★ 7 Abreviews 5 References 5 Images

Overview

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

Description Rabbit monoclonal [EPR703(2)] to Estrogen Receptor alpha

Host species Rabbit

Specificity Expression levels of ER alpha protein vary with sample type.

Tested applications Suitable for: WB. IHC-P

Unsuitable for: Flow Cyt,ICC/IF or IP

Reacts with: Human Species reactivity

Predicted to work with: Baboon

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control MCF-7 cell lysate. Human breast carcinoma tissue.

General notes 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.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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

Form

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

Purity Tissue culture supernatant

Clonality Monoclonal
Clone number EPR703(2)

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

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

	_		
	2	ra	nt
-	a	ıu	CL

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 similaritiesBelongs to the nuclear hormone receptor family. NR3 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

DomainComposed 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.

 $\label{lem:contains} \mbox{ Glycosylated; contains N-acetylglucosamine, probably O-linked.}$

Ubiquitinated. Deubiquitinated by OTUB1.

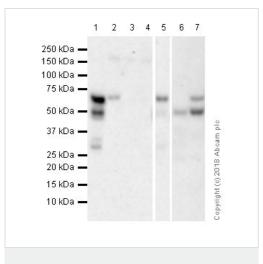
Dimethylated by PRMT1 at Arg-260. The methylation may favor cytoplasmic localization.

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

Cellular localizationNucleus. 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



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

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.

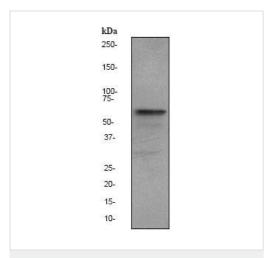
Secondary

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



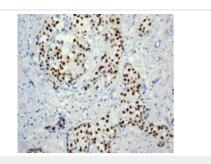
Western blot - Anti-Estrogen Receptor alpha antibody [EPR703(2)] (ab79413)

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 paraffinembedded 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.



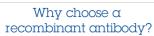


2014 Abcam

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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 lgG polyclonal (7μg/ml) was used as the secondary antibody.







Consistent and reproducible results







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"

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.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