




## Product datasheet

# Anti-Estrogen Receptor beta antibody ab3576

★★★★★ [8 Abreviews](#) [94 References](#) [2 Images](#)

### Overview

<b>Product name</b>	Anti-Estrogen Receptor beta antibody
<b>Description</b>	Rabbit polyclonal to Estrogen Receptor beta
<b>Host species</b>	Rabbit
<b>Specificity</b>	By Western blot, this antibody detects an ~55 kDa protein representing ER beta from Rat brain homogenate. Immunocytochemical staining of ER beta in cells overexpressing the Human protein results in nuclear staining.
<b>Tested applications</b>	<b>Suitable for:</b> ICC, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Hamster 
<b>Immunogen</b>	Synthetic peptide corresponding to Rat Estrogen Receptor beta aa 467-485. Sequence: CSSTEDSKNKESQNLQSQ  (Peptide available as <a href="#">ab5018</a> ) <div>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	WB: MCF7 whole cell lysate; T47 and SK-BR3 nuclear extracts
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS

<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab3576 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		1/100 - 1/1000.
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Predicted molecular weight: 59 kDa.

## Target

**Function** Nuclear hormone receptor. Binds estrogens with an affinity similar to that of ESR1, and activates expression of reporter genes containing estrogen response elements (ERE) in an estrogen-dependent manner. Isoform beta-cx lacks ligand binding ability and has no or only very low ere binding activity resulting in the loss of ligand-dependent transactivation ability. DNA-binding by ESR1 and ESR2 is rapidly lost at 37 degrees Celsius in the absence of ligand while in the presence of 17 beta-estradiol and 4-hydroxy-tamoxifen loss in DNA-binding at elevated temperature is more gradual.

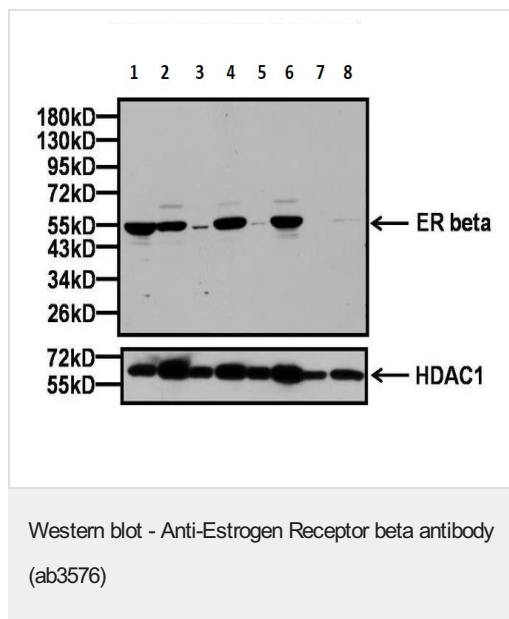
**Tissue specificity** Isoform beta-1 is expressed in testis and ovary, and at a lower level in heart, brain, placenta, liver, skeletal muscle, spleen, thymus, prostate, colon, bone marrow, mammary gland and uterus. Also found in uterine bone, breast, and ovarian tumor cell lines, but not in colon and liver tumors. Isoform beta-2 is expressed in spleen, thymus, testis and ovary and at a lower level in skeletal muscle, prostate, colon, small intestine, leukocytes, bone marrow, mammary gland and uterus. Isoform beta-3 is found in testis. Isoform beta-4 is expressed in testis, and at a lower level in spleen, thymus, ovary, mammary gland and uterus. Isoform beta-5 is expressed in testis, placenta, skeletal muscle, spleen and leukocytes, and at a lower level in heart, lung, liver, kidney, pancreas, thymus, prostate, colon, small intestine, bone marrow, mammary gland and uterus. Not expressed in brain.

**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.

**Cellular localization** Nucleus.

## Images



**All lanes** : Anti-Estrogen Receptor beta antibody (ab3576) at 1/1000 dilution

**Lane 1** : MCF7 whole cell lysates

**Lane 2** : MCF7 nuclear extract

**Lane 3** : T47D whole cell lysates

**Lane 4** : T47D nuclear extract

**Lane 5** : SK-BR-3 whole cell lysates

**Lane 6** : SK-BR-3 nuclear extract

**Lane 7** : Hs 578T whole cell lysates

**Lane 8** : Hs 578T nuclear extract

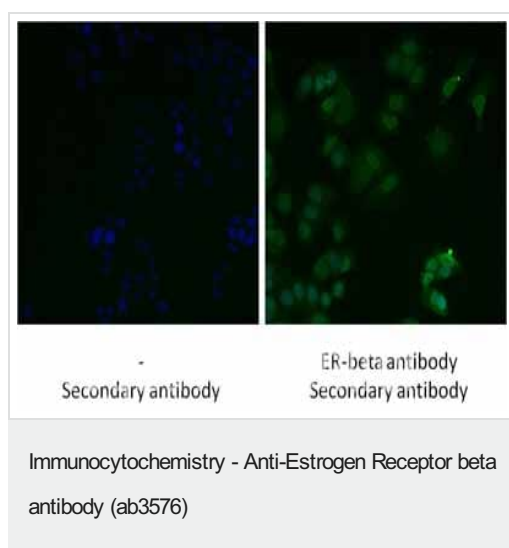
Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : HRP-conjugated goat anti-rabbit IgG at 1/40000 dilution

**Predicted band size:** 59 kDa

HDAC1 polyclonal antibody (bottom panel) at a dilution of 1/1000 overnight at 4C, followed by an HRP-conjugated goat anti-rabbit IgG secondary antibody at a dilution of 1/40,000. Chemiluminescent detection.



Immunofluorescent analysis using Estrogen Receptor beta polyclonal antibody (ab3576) shows nuclear localization of Estrogen Receptor beta in MCF7 cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature. Cells were blocked with 1% BSA for 15 minutes at room temperature. Cells were probed with a rabbit polyclonal antibody recognizing Estrogen Receptor beta (ab3576), at a dilution of 1:100 for 1 hour at room temperature. Cells were washed with PBS and incubated with DyLight 488 goat-anti-rabbit IgG secondary antibody at a dilution of 1:400 for 30 minutes at room temperature. Nuclei (blue) were stained with Hoechst 33342 dye. Images were taken at 20X magnification.

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

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