

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ER $\beta$ /NR3A2 in direct ELISAs and Western blot. In direct ELISA and Western blot, no cross-reactivity with recombinant human ER $\alpha$ is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 733930
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human ER $\beta$ /NR3A2 Met1-Gly318 Accession # Q92731
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Intracellular Staining by Flow Cytometry</b>	0.25-1 $\mu$ g/10 <sup>6</sup> cells	MCF-7 human breast cancer cell line fixed with paraformaldehyde and permeabilized with saponin

#### PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** **Protect from light. Do not freeze.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

#### BACKGROUND

Estrogen Receptor beta (ER $\beta$ ; NR3A2) is a member of the steroid receptor family. The natural ligand for ER is the classical estrogenic compound 17 $\beta$ -estradiol. ER $\beta$  is expressed in the granulosa cell layer of primary, secondary and mature follicles in the ovary, in bone, bladder, uterus, testis, epididymis, gastrointestinal tract, kidney, breast, heart, vessel wall, immune system, lung, pituitary, hippocampus and hypothalamus. Roles for ER $\beta$  in the reproductive and cardiovascular systems have been reported, although these are the subject of conflicting reports. ER $\beta$  has been postulated to act primarily as a modulator of ER $\alpha$  function. ER $\beta$  has been shown to form homodimers as well as heterodimers with ER $\alpha$ . Both ER $\alpha$  and ER $\beta$  can give rise to numerous isoforms.

#### PRODUCT SPECIFIC NOTICES

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