

### **Product datasheet**

## anti-Estrogen-Receptor mouse monoclonal, ER-70, purified

#### Short overview

**Cat. No.** 691684

Quantity1 ml (100  $\mu$ g/ml)Concentration100  $\mu$ g/ml

### **Product description**

Host Mouse
Antibody Type Monoclonal
Isotype IgG1 kappa
Clone ER-70

Immunogen Recombinant human estrogen receptor alpha protein (aa2-85)

**Formulation** PBS with 0.02% sodium azide

UniprotID P03372 (Human)

Synomym Estrogen receptor, ER, ER-alpha, Estradiol receptor, Nuclear receptor subfamily 3 group A

member 1, ESR1, ESR, NR3A1

**Conjugate** Unconjugated

**Purification** Affinity chromatography

Storage 2-8°C

Intended use Research use only

Application IHC Reactivity Human

### **Applications**

Immunohistochemistry (IHC) - frozen 1:25-1:50 (2-4 μg/ml)

**Immunohistochemistry (IHC) - paraffin** 1:25-1:50 (2-4 μg/ml; microwave treatment in 10 mM citrate buffer pH

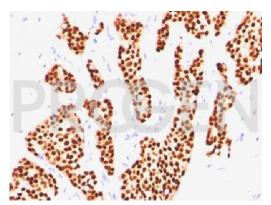
6.0 recommended)

#### Background

ER-70 is specific to ER alpha (67 kDa) and shows minimal cross-reaction with other members of the family. ER is an important regulator of growth and differentiation in the mammary gland. Presence of ER in breast tumors indicates are increased likelihood of response to anti-estrogen (e.g. tamoxifen) therapy. Structurally ER consists of 6 functional domains (domain A-F). Functional mapping of the estrogen receptor has determined a transcriptional promoting activity in the A/B domain. The hormone-binding domain (E domain) is located towards the carboxy terminal, whereas the DNA-binding domain (C-domain) is found in the central portion of the molecule. It has been speculated that the presence in breast cancer cells of truncated forms of estrogen receptor lacking the hormone-binding domain might promote the uncontrolled growth of the tumor. The ER-70 epitope is located in the transcriptional promoting (A/B) domain of ER).

Positive control: Human uterus, ER positive breast cancer, MCF-7 cells.

# **Product images**



Human breast cancer