

# Datasheet



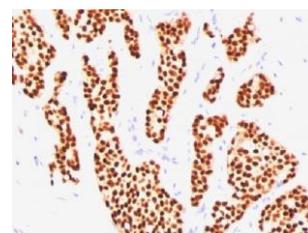
Mouse mAb to **Estrogen Receptor**  
Clone **ER-70**  
Isotype **IgG1-κ**

## Source

A BALB/c mouse was immunized with recombinant human estrogen receptor alpha protein (aa2-85).  
Fusion partner: SP2/0.

## Specifications

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 an 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).



**Figure 1:** Human breast cancer stained with ER-70

## Species reactivity

Positive: human.

## Applications

ER-70 is excellent for staining of formalin-fixed, paraffin-embedded breast carcinomas.

Frozen sections	Paraffin sections
+	citrate

## Format

Produced in tissue culture, contains no host Ig. Antibodies are affinity purified and presented in PBS with 0,02% sodium azide.

Stored at 4°C-8°C, shelf life is at least 24 months after purchase.

## Dilution advice

- Immunohistochemistry (formalin-fixed: 2-4 µg/ml for 30 min at RT; staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes).

## Positive control

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

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## References

- Zafrani, B. et al. *Histopathology* **37(6)**: 536-45 (2000).
- Harvey J. et al. *J.Clin. Oncol.* **17(5)**: 1474-81 (1999).