

# Datasheet



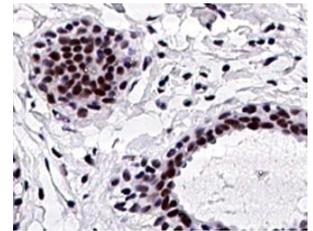
Mouse mAb to **Estrogen Receptor**  
Clone **AER-304**  
Isotype **IgG1-κ**

## Source

A BALB/c mouse was immunized with estrogen receptor from calf uterus.  
Fusion partner: Sp2/0.

## Specifications

AER-304 reacts with ER (67 kDa) an important regulator of growth and differentiation in the mammary gland. Presence of ER in breast tumors indicates an increase 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 lacking the hormone-binding domain might promote the uncontrolled growth of the tumor. AER-304 epitope is located at the amino terminal end (aa 120-179; B domain) of ER.



**Figure 1:** Human breast cancer stained for estrogen receptor (frozen)

## Species reactivity

Positive: cow, human, mouse.

## Applications

AER-304 is suitable for frozen sections only.

| Frozen sections | Paraffin sections |
|-----------------|-------------------|
| +               | -                 |

## 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

- Immunohistology (1-2 µg/ml for 30 min at RT; an appropriate antigen retrieval method for staining of formalin-fixed tissues has not been established to date).

## Positive control

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

## References

- Abbondanza C et. al. *Steroids* **58**: 4-12 (1993).