

## Recombinant Estrogen Receptor, alpha (Marker of Estrogen Dependence) Antibody

Rabbit Monoclonal Antibody [Clone ESR1/6983R]

Catalog No	Format	Size
2099-RBM43-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
2099-RBM43-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
2099-RBM43-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

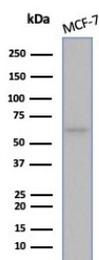
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

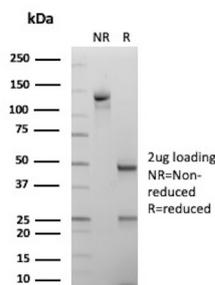
<b>Clone</b>	ESR1/6983R
<b>Gene Name</b>	ESR1
<b>Immunogen</b>	Recombinant fragment (around aa495-595) of human ER alpha protein (exact sequence is proprietary)
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG / Kappa
<b>Mol. Weight of Antigen</b>	~67kDa
<b>Cellular Localization</b>	Cell membrane, Cytoplasm, Golgi apparatus, Nucleus
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	MCF-7 cells. Human breast or endometrial carcinoma.

\*Optimal dilution for a specific application should be determined.

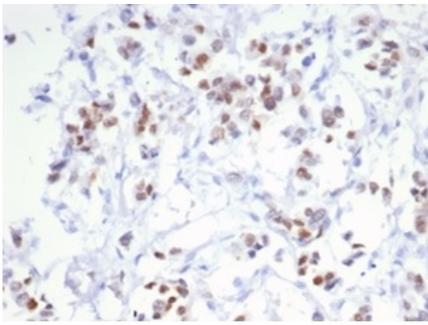
### Product Images for Recombinant Estrogen Receptor, alpha (Marker of Estrogen Dependence) Antibody



Western Blot Analysis of human MCF-7 cell lysate using Estrogen Receptor, alpha Rabbit Recombinant MAbs (ESR1/6983R).



SDS-PAGE Analysis of Purified ESR1 Recombinant Rabbit Monoclonal Antibody(ESR1/6983R). Confirmation of Purity and Integrity of Antibody.



Formalin fixed paraffin embedded human breast carcinoma stained with ER, alpha Rabbit Recombinant Monoclonal Antibody (ESR1/6983R). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

### Specificity & Comments

Estrogen receptor (ER) belongs to the steroid receptor superfamily of nuclear receptors. It is a protein with 553 amino acids. The receptor molecule has three domains, i.e. the central DNA-binding domain, the hormone-binding domain at the C-terminal, and the transcription-activating domain at the N-terminal. ER mediates regulatory functions of female sex steroids, mainly 17 (E2), on growth, differentiation and function in several target tissues, including female and male reproductive tract, mammary gland, and skeletal and cardiovascular systems. Studies have shown ER  $\alpha$  is present in the nuclei of epithelial cells in normal breast and endometrial tissues, as well as a subset of breast carcinomas. Studies with immunohistochemical assay show that positive steroid hormone status has predicted favorable overall survival, independently of hormonal treatment. Secondly, ER  $\alpha$  can be used as a tumor marker, preferentially in combination with an antibody to progesterone receptor, e.g., in the classification of adenocarcinomas.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Breast Cancer, Cardiovascular, Infectious Disease, Ovarian Cancer, Signal Transduction, Transcription Factors