

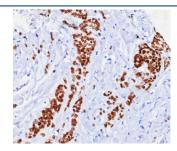
# ER alpha Antibody / Estrogen Receptor alpha [clone ESR1/7444R] (V5169)

Catalog No.	Formulation	Size
V5169-100UG	0.2~mg/ml in 1X PBS with $0.1~mg/ml$ BSA (US sourced), $0.05%$ sodium azide	100 ug
V5169-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5169SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

### Recombinant RABBIT MONOCLONAL

### **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	ESR1/7444R
Purity	Protein A/G affinity
UniProt	P03372
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This ER alpha antibody is available for research use only.



Formalin fixed paraffin embedded human breast carcinoma tissue with ER alpha antibody (clone ESR1/7444R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

# **Description**

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.

### **Application Notes**

Optimal dilution of the ER alpha antibody should be determined by the researcher.

### **Immunogen**

A recombinant partial protein sequence (within amino acids 495-595) from the human protein was used as the immunogen for the ER alpha antibody.

## **Storage**

Aliquot the ER alpha antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.