

# Estrogen Receptor; Clone ERa078


## (Concentrate)

Availability/Contents:	Item #	Volume
	A00128-C	1 ml

### Description:

Species:	Mouse
Immunogen:	A recombinant fragment specific to human estrogen receptor protein was used as the immunogen for the ERa078 antibody.
Clone:	ERa078
Isotype:	Mouse IgG1, Kappa
Format:	This antibody is provided in a phosphate buffered saline containing 1% BSA.
Specificity:	This antibody is specific for estrogen receptor.
Background:	The estrogen receptor (ER) is a ~ 67kDa protein, originally described by Jensen and Jacobson, 1962 as a uterine protein which bound 3H-estradiol with high affinity. More than two decades later the cDNA encoding the human estrogen receptor was finally cloned and sequenced. The estrogen receptor gene consists of more than 140kb of genomic DNA divided into 8 exons, being translated into a protein with six functionally discrete domains, labeled A through F. The A/B domain of the estrogen receptor contains a constitutively active transcription activation function called TAF-1. Domain C contains two Cys4 zinc fingers, which form the core of the DNA binding domain; it also contains a weak constitutive dimerization activity. The zinc fingers interact with DNA, and the ER homodimer appears to bind most tightly to the palindromic estrogen response element (ERE) sequence GGATC>NNNGATCC. The hinge domain D appears to be the location for binding by heat shock proteins. The estrogen receptor is an important regulator of growth and differentiation in the mammary gland. Estrogens play an important role also in breast cancer development, although tumors often progress towards an autocrine growth. This hormone-independence and the incomplete correlation between ER-status and response to endocrine (tamoxifen) therapy may be explained by the presence of receptor variants with either constitutive transcriptional activity or a dominant negative inhibition of normal ER function. Many investigators have reported on the isolation of cDNAs which encode variant ER sequences. Many of these variants appear to be formed by errors in RNA splicing which result in one or more exons being lost during processing of the ER message.
Species Reactivity:	Human.
Positive Control:	Breast carcinoma.
Cellular Localization:	Nuclear.
Titer/Working Dilution:	Immunohistochemistry: 1:100 – 1:200
Microbiological State:	This product is not sterile.

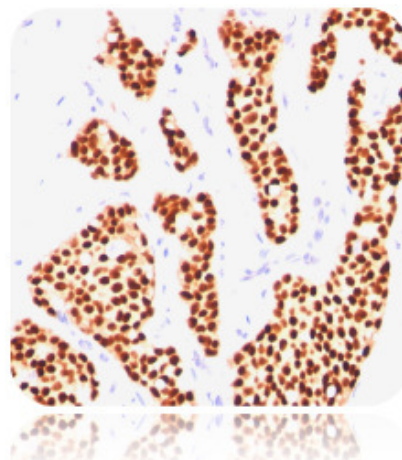
 Storage: 2° C  8° C


 ScyTek Laboratories, Inc.  
 205 South 600 West  
 Logan, UT 84321  
 U.S.A.

 EC REP EmergoEurope (31)(0) 70 345-8570  
 Molsnstraat 15  
 2513 BH Hague, The Netherlands

### Uses/Limitations:

Not to be taken internally.  
For In Vitro Diagnostic Use.  
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
Do not use if reagent becomes cloudy.  
Do not use past expiration date.  
Use caution when handling reagents.  
Non-Sterile.



Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)

### Procedure:

- Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).


### Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).  
Do not pipette by mouth.  
Avoid contact of reagents and specimens with skin and mucous membranes.  
Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

### References:

- Greene GL; Nolan C; Engler JP; Jensen EV. Proceedings of the National Academy of Sciences of the United States of America, 1980, 77(9):5115-9.
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- Green S; Chambon P. Nature, 1986, 324(6098):615-7.
- Green S; Gronemeyer H; et al. Growth Factors and Oncogenes in Breast Cancer, 1987. Chichester, England, Ellis Horwood Ltd. 7-28.
- Evans RM. Science, 1988, 240:889-95.
- Danielson M; Northrop JP; et al. EMBO Journal, 1986, 5:2513-22.
- Kumar V; Green S; Stack G; Berry M; Jin JR; Chambon P. Cell, 1987, 51(6):941-51.
- Greene GL; Sobel BN; et al. Molecular Endocrinology, 1988, 2:714-26.
- Jensen EV; Jacobson HI. Recent Progress in Hormone Research, 1962, 18:387-414.
- Walter P; Green S; Greene G; Krust A; Bornert JM; Jeltsch JM; Staub A; Jensen E; Scrase G; Waterfield M; et al. Proc Nat Academy of Sciences of the United States of America, 1985, 82(23):7889-93.

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CE IVD

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# Instructions For Use

## A00128-C-IFU-IVD



Rev. Date: May 13, 2013

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