

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

Mouse Monoclonal Antibody [Clone ER506]

| Catalog No      | Format                                        | Size   |
|-----------------|-----------------------------------------------|--------|
| 2099-MSM2-P0    | Purified Ab with BSA and Azide at 200ug/ml    | 20 ug  |
| 2099-MSM2-P1    | Purified Ab with BSA and Azide at 200ug/ml    | 100 ug |
| 2099-MSM2-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

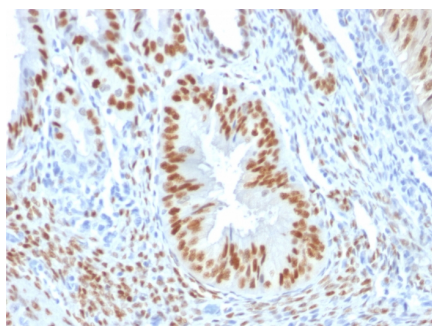
| Applications               | Tested Dillution    | Note                                                                                                                                                                              |
|----------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flow Cytometry (Flow)      | 1-2ug/million cells |                                                                                                                                                                                   |
| Immunofluorescence (IF)    | 1-3ug/ml            |                                                                                                                                                                                   |
| 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

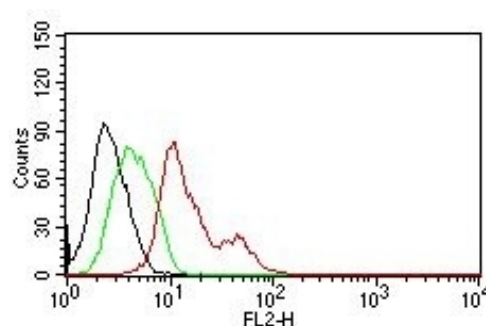
|                        |                                                                                                                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------|
| Clone                  | ER506                                                                                                           |
| Gene Name              | ESR1                                                                                                            |
| Immunogen              | Recombinant fragment (around aa 2-185) of human Estrogen Receptor alpha protein (exact sequence is proprietary) |
| Host                   | Mouse                                                                                                           |
| Clonality              | Monoclonal                                                                                                      |
| Isotype / Light Chain  | IgG1 / Kappa                                                                                                    |
| Mol. Weight of Antigen | ~67kDa                                                                                                          |
| Cellular Localization  | Cell membrane, Cytoplasm, Golgi apparatus, Nucleus                                                              |
| Species Reactivity     | Human                                                                                                           |
| Positive Control       | T47D, MCF-7 cells. Human breast or endometrial carcinoma.                                                       |

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

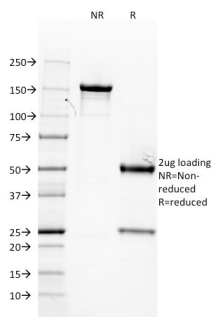
### Product Images for Estrogen Receptor, alpha (Marker of Estrogen Dependence) Antibody



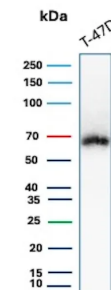
Formalin-fixed, paraffin-embedded human Endometrium stained with Estrogen Receptor alpha Mouse Monoclonal Antibody (ER506).



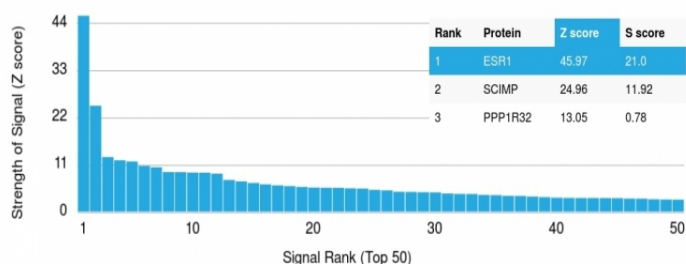
Flow Cytometry for human ER-alpha on MCF-7 cells. Black: cells alone; Green: Isotype Control; Red: PE-labeled Estrogen Receptor alpha Mouse Monoclonal Antibody (ER506).



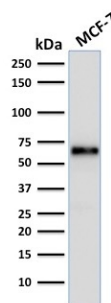
SDS-PAGE Analysis Purified Estrogen Receptor alpha Mouse Monoclonal Antibody (ER506). Confirmation of Integrity and Purity of Antibody.



Western Blot Analysis of T47D lysate using ESR1 Mouse Monoclonal Antibody (ER506).



Analysis of Protein Array containing more than 19,000 full-length human proteins using Estrogen Receptor, alpha Mouse Monoclonal Antibody (ER506). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Western Blot Analysis of MCF-7 lysate using Estrogen Receptor alpha Mouse Monoclonal Antibody (ER506).

## Specificity & Comments

This MAb is specific to ER alpha 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. It strongly stains nuclei of epithelial cells in breast carcinomas.

## Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate 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, Cancer, Cardiovascular, Infectious Disease, Ovarian Cancer, Signal Transduction, Transcription Factors

## 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.