

# ER-beta-1 (Estrogen Receptor beta-1) Antibody

Mouse Monoclonal Antibody [Clone ESR2/686]

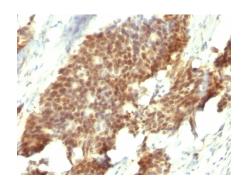
Catalog No	Format	Size
2100-MSM2-P0	Purified Ab with BSA and Azide	200ug/ml
2100-MSM2-P1	Purified Ab with BSA and Azide	200ug/ml
2100-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

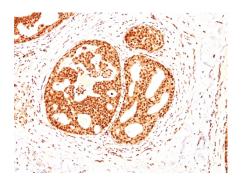
Product Details		
Clone	ESR2/686	
Gene Name	ESR2	
Immunogen	C-terminus fragment of recombinant human estrogen receptor beta protein	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG2a / Kappa	
Mol. Weight of Antigen	53-59kDa	
Cellular Localization	Nucleus	
Species Reactivity	Human	
Positive Control	Bladder, Breast, gastric or salivary carcinoma (IHC)., MCF-7 cells (FACS/IF). Ovarian	

<sup>\*</sup>Optimal dilution for a specific application should be determined.

## Product Images for ER-beta-1 (Estrogen Receptor beta-1) Antibody

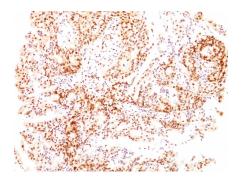


Formalin-fixed, paraffin-embedded human Gastric Carcinoma stained with ERbeta Mouse Monoclonal Antibody (ESR2/686).

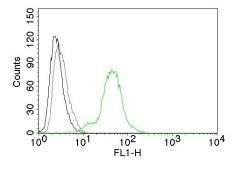


Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with ERbeta Mouse Monoclonal Antibody (ESR2/686).

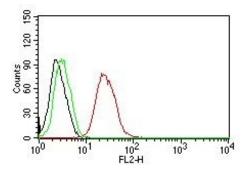




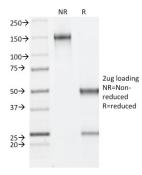
Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with ERbeta Mouse Monoclonal Antibody (ESR2/686).



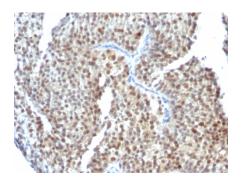
Flow Cytometry of human ER beta on BT474 cells. Black: cells alone; Grey: Isotype Control; Green: AF488-labeled ER-beta Mouse Monoclonal Antibody (ESR2/686).



Flow Cytometry for human ER-beta on MCF-7 cells. Black: cells alone; Green: Isotype Control; Red: PE-labeled ER-beta Mouse Monoclonal Antibody (ESR2/686).



SDS-PAGE Analysis Purified ER-beta Mouse Monoclonal Antibody (ESR2/686). Confirmation of Integrity and Purity of Antibody.



Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with ER-beta Mouse Monoclonal Antibody (ESR2/686).

#### **Specificity & Comments**

Estrogen receptors (ER) are members of the steroid/thyroid hormone receptor superfamily of ligand-activated transcription factors. Estrogen receptors, including ER-alpha and ER-beta, contain DNA binding and ligand binding domains and are critically involved in regulating the normal function of reproductive tissues. They are located in the nucleus, though some estrogen receptors associate with the cell surface membrane and can be rapidly activated by exposure of cells to estrogen. ER-alpha and ER-beta are differentially activated by various ligands. Receptor-ligand interactions trigger a cascade of events, including dissociation from heat shock proteins, receptor dimerization, phosphorylation and the association of the hormone activated receptor with specific regulatory elements in target genes. Evidence suggests that ER-alpha and ER-beta may be regulated by distinct mechanisms even though they share many functional characteristics.

#### **Research Areas**

Breast Cancer, Cardiovascular, Infectious Disease, Nuclear Marker, Signal Transduction, Transcription Factors

#### **Known Applications & Suggested Dilutions**

Flow Cytometry (1-2ug/million cells) | Immunofluorescence (1-2ug/ml) | Western Blot (1-2ug/ml) | Immunohistochemistry (Formalinfixed) (1-2ug/ml for 30 minutes 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&degC followed by cooling at RT for 20 minutes) | Optimal dilution for a specific application should be determined.

#### 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  $8^{\circ}$ C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### **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.