

Basic Information

Product Name	Anti-ER/ESR1 Antibody	
Gene Name	ESR1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Estrogen Receptor recombinant protein (Position: F425-V595). Human Estrogen Receptor shares 89% and 88% amino acid (aa) sequences identity with mouse and rat Estrogen Receptor, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	66 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Estrogen receptor alpha (ER- α), also known as NR3A1, is one of two main types of estrogen receptor, a nuclear receptor that is activated by the sex hormone estrogen. Estrogen receptors are involved in pathological processes including breast cancer, endometrial cancer, and osteoporosis. In humans, ER- α is encoded by the gene ESR1 (Estrogen Receptor 1). It is mapped to 6q25.1. This gene is a ligand-activated transcription factor composed of several domains important for hormone binding, DNA binding, and activation of transcription. The protein localizes to the nucleus where it may form a homodimer or a heterodimer with estrogen receptor 2. Estrogen and its receptors are essential for sexual development and reproductive function, it also play a role in other tissues such as bone.

Reference

Anti-ER/ESR1 Antibody被引用在13文献中。

Selected Validation Data

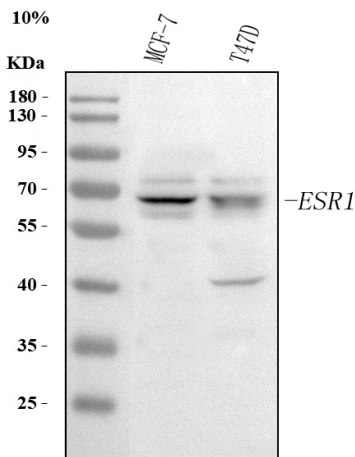


Figure 1. Western blot analysis of anti-ER/ESR1 antibody (PB0188). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,

Lane 2: human T-47D whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ER/ESR1 antigen affinity purified polyclonal antibody (PB0188) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054).

The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ER/ESR1 at approximately 66 kDa.

The expected band size for ER/ESR1 is at 66 kDa.

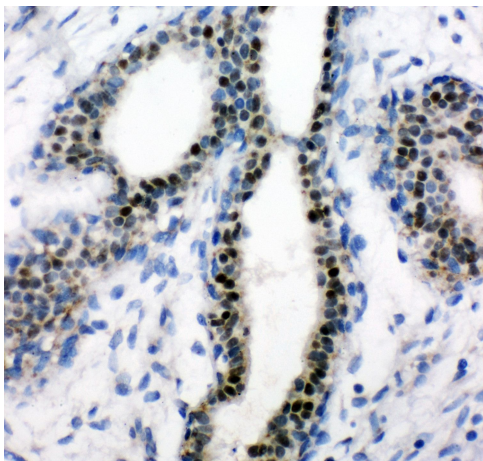


Figure 2. IHC analysis of ER/ESR1 using anti-ER/ESR1 antibody (PB0188).

ER/ESR1 was detected in a paraffin-embedded section of human mammary cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ER/ESR1 Antibody (PB0188) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.