

# Monoclonal Antibody to ER

Cat. #: Mab-607082

## Description

ER (estrogen receptor 1) a member of the steroid receptor superfamily, contains highly conserved DNA binding (DBD) and ligand binding domains (LBD). Through its estrogen-independent and estrogen-dependent activation domains (AF-1 and AF-2, respectively), ER regulates transcription by recruiting coactivator proteins and interacting with general transcriptional machinery. Phosphorylation provides an important mechanism to regulate ER activity. ER is phosphorylated on multiple sites. Serines 104, 106, 118 and 167 are located in the amino-terminal transcription activation function domain AF-1, and phosphorylation of these serines plays an important role in regulating ER activity. Ser118 may be the substrate of the transcription regulatory kinase cdK7. Ser167 may be phosphorylated by p90RSK and Akt. Phosphorylation of Ser167 may confer tamoxifen resistance in breast cancer patients.

## Immunogen

Ni-NTA purified truncated recombinant ER expressed in E. Coli strain BL21 (DE3)

## Applications

Western Blot: 1: 500- 1: 2,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

## Formulation

Crude ascites.

## References

1. ampbell, R.A. et al. 2001, J. Biol. Chem. 276, 9817-9824.

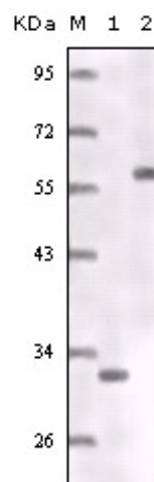
2. Chen, D. et al. 2000, Mol. Cell 6, 127-137.

Clone Number: 5D4B1,5D4E3

Isotype: IgG2b

Species: Human

Storage and Stability: stored at -20 C



**Figure 1:** Western blot analysis using ER monoclonal antibody against truncated ER recombinant protein(1) MCF-7 cell lysates (2).