

## ERalpha monoclonal antibody

**Other names:** ESR, ESR1, ESRA, NR3A14

**Cat. No.** C15100066

**Type:** Monoclonal ChIP grade/ChIP-seq grade

**Isotype:** IgG1 kappa

**Source:** Mouse

**Lot #:** 007

**Size:** 100 µl

**Concentration:** Not determined

**Specificity:** Human, mouse: positive

Does not react with chicken; other species not tested

**Purity:** Ascites fluid from mouse containing 0.05% azide.

**Storage:** Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.

**Precautions:** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Description:** Monoclonal antibody raised in mouse against human ERalpha (estrogen receptor alpha), using a synthetic peptide.

### Applications

	Suggested dilution	Results
ELISA	1:500 - 1:5,000	
Western blotting	1:500 - 1:5,000	Ref 3
Gel Supershift	1:10 - 1:20	
Immunochemistry	1:500 - 1:5,000	
Immunoprecipitation	1:200 - 1:5,000	Ref 3
ChIP*	2.5 µl per ChIP	Fig 1; Ref 1, 2

\*Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 1-5 µl per IP.

### References

**This antibody has been described in:**

- [1] Welboren WJ, van Driel MA, Janssen-Megens EM, van Heeringen SJ, Sweep FCJG, Span PN and Stunnenberg HG (2009) ChIP-Seq of ERα and RNA polymerase II defines genes differentially responding to ligands. EMBO J 28: 1418-1428.
- [2] Welboren W-J and Stunnenberg H (2008) ChIP-Seq profiling of estrogen receptor alpha binding sites using the Illumina Genome Analyzer. Application Note: Illumina Sequencing.
- [3] Han SI, Komatsu Y, Murayama A, Steffensen KR, Nakagawa Y, Nakajima Y, Suzuki M, Oie S, Parini P, Vedin LL, Kishimoto H, Shimano H, Gustafsson JÅ, Yanagisawa (2014)

### Target description

The estrogen receptor alpha (ERalpha, UniProt/Swiss-Prot entry P03372) belongs to the family of nuclear hormone receptors, which are ligand-activated transcription factors. They are important for the regulation of gene expression, cellular proliferation and differentiation, sexual development and reproductive function. Estrogen receptors are also involved in pathological processes such as breast cancer, and osteoporosis. ERalpha can regulate transcription by direct binding to estrogen response elements (EREs) in the DNA or by interaction with other transcription factors. It may also form a heterodimer with ERbeta.

