TECHNICAL DATA SHEET

PRODUCT NAME **hERalpha monoclonal antibody**		
Other names: ESR, ESR1, ESRA, NR3A1		
Cat. No. AC-066-100	**Type:** Monoclonal **ChIP-grade / ChIP-seq grade**	**Size:** 100 µl
Lot #: 001	**Source:** Mouse	**Concentration:** Not determined

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

Specificity: Human: positive
Does not react with chicken; other species not tested

Applications	Suggested dilution	References
ELISA	1:500 -1:5,000	
Western blotting	1:500 -1:5,000	
Gel Supershift	1:10 – 1:20	
Immunochemistry	1:500 -1:5,000	
Immunoprecipitation	1:200 -1:5,000	
ChIP	2.5 µl	(1, 2)

Purity: Ascites 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.

Last data sheet update: March 2, 2010

References citing this antibody:

(1) Welboren W.J., van Driel M.A., Janssen-Megens E.M., van Heeringen S.J., Sweep F.C.J.G, Span P.N. and Stunnenberg H.G. (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.

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.