diagenode
A Hologic Company

TECHNICAL DATASHEET

PRODUCT NAME hERα monoclonal antibody		
Other names: ESR1, ER, ESR, ESRA, NR3A1		
Cat. No. C15200009 (MAb-009-050)	**Type:** Monoclonal **ChIP-grade** **Isotype:** IgG3	**Size:** 50 µg/ 25 µl
Lot #: 001	**Source:** Mouse	**Concentration:** 2.0 µg/µl

Product description: Monoclonal antibody raised in mouse against the NH2 terminus of the human ERα (estrogen receptor alpha), using a KLH-conjugated synthetic peptide (Q19-K32).

Specificity: Human: positive
Other species: not tested

Applications	Suggested dilution	References
ChIP*	5 µg per ChIP	Fig 1
Western blotting	7 µg/ml	Fig 2
Immunochemistry	15 µg/ml	Fig 3

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

Purity: Monoclonal antibody in PBS containing 0.01% thimerosal; purified by ammonium sulphate precipitation followed by dialysis.

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.

References citing this antibody:
(1) Fullwood MJ et al. (2009) An Oestrogen Receptor Ð-bound Human Chromatin Interactome. Nature 462: 58-63.

Last data sheet update: : April 22, 2011

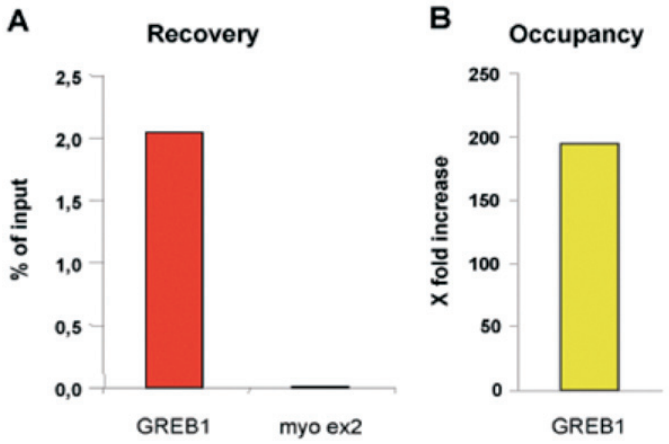

Figure 1

ChIP using the Diagenode monoclonal antibody against hERα from

ChIP assays were performed using MCF7 cells, treated with the ER agonist estradiol for 3 hours prior to harvesting., the Diagenode monoclonal antibody directed against ER alpha (Cat. No. MAb-009-050) and optimized primer sets for qPCR. Sheared chromatin from 3 million cells and 5 µg of antibody were used per ChIP experiment. Recovery (%: ChIP/input) and occupancy (x fold: +ve/-ve) are shown in figure 1. QPCR was performed with primers for the GREB1 promoter and for exon 2 of the myoglobin gene (Cat. No. pp-1006-050), used as a negative control. Figure 1 shows the recovery (the relative amount of immunoprecipitated DNA compared to input DNA) and the occupancy (ratio +/- control target).

These results demonstrate the occupancy of the GREB1 promoter by ERalpha.

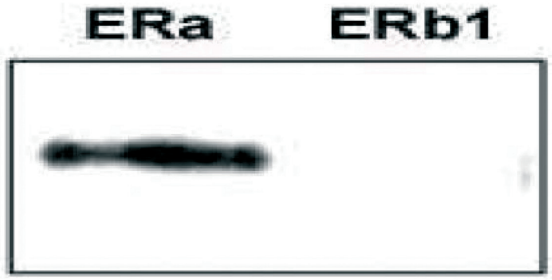

Figure 2

Western blot analysis using the Diagenode monoclonal antibody against hERÐ

Western blot analysis was performed on 100 fmol ER alpha (ERa) and ER beta (ERb1) recombinant protein with the Diagenode monoclonal antibody directed against ER alpha (Cat. No. MAb-009-050) at a concentration of 7 µg/ml. Figure 2 shows the specificity of the antibody for the ER alpha isoform, whereas the ER beta isoform is not recognized.

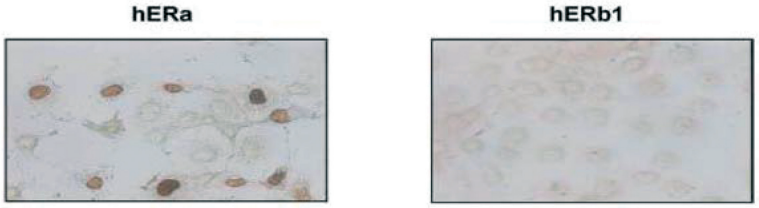

Figure 3

Immunocytochemistry using the Diagenode monoclonal antibody against hERα

COS-7 cells transiently overexpressing human ERÐ (left) or ERß1 (right) were labeled with the Diagenode antibody against ER alpha (Cat. No. MAb-009-050), used at a concentration of 15 µg/ml, followed by a biotinylated secondary antibody and peroxidase-labeled avidin.

Figure 3 shows the specificity of the antibody for the ER alpha isoform.