

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

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

Specificity: Human: positive
Other species: not tested

Applications	Suggested dilution	References
ChIP*	5 μ g per ChIP	Fig 1
Western blotting	7 μ g/ml	Fig 2
Immunochemistry	15 μ g/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 μ g 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 β -bound Human Chromatin Interactome. Nature 462: 58-63.

Last data sheet update: : April 22, 2011

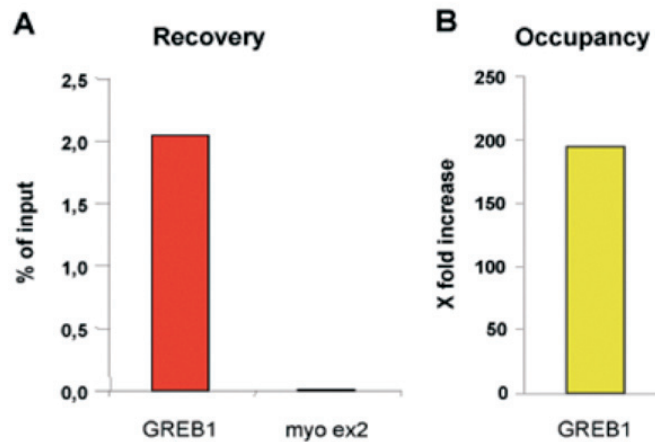


Figure 1

ChIP using the Diagenode monoclonal antibody against hER α 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 μ g 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.

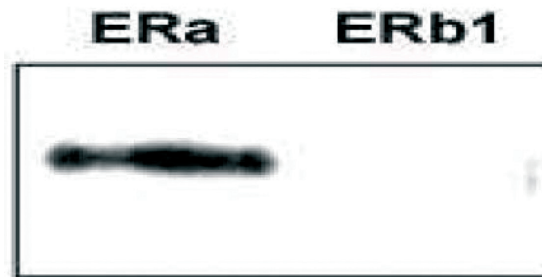


Figure 2

Western blot analysis using the Diagenode monoclonal antibody against hER α

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 μ g/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 ERα (left) or ERβ1 (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.