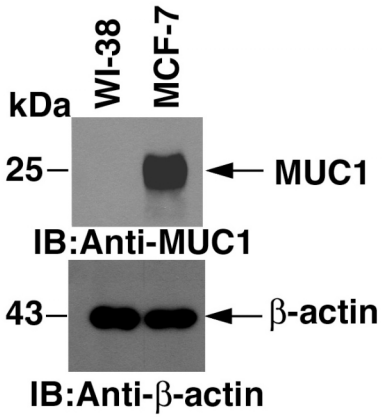
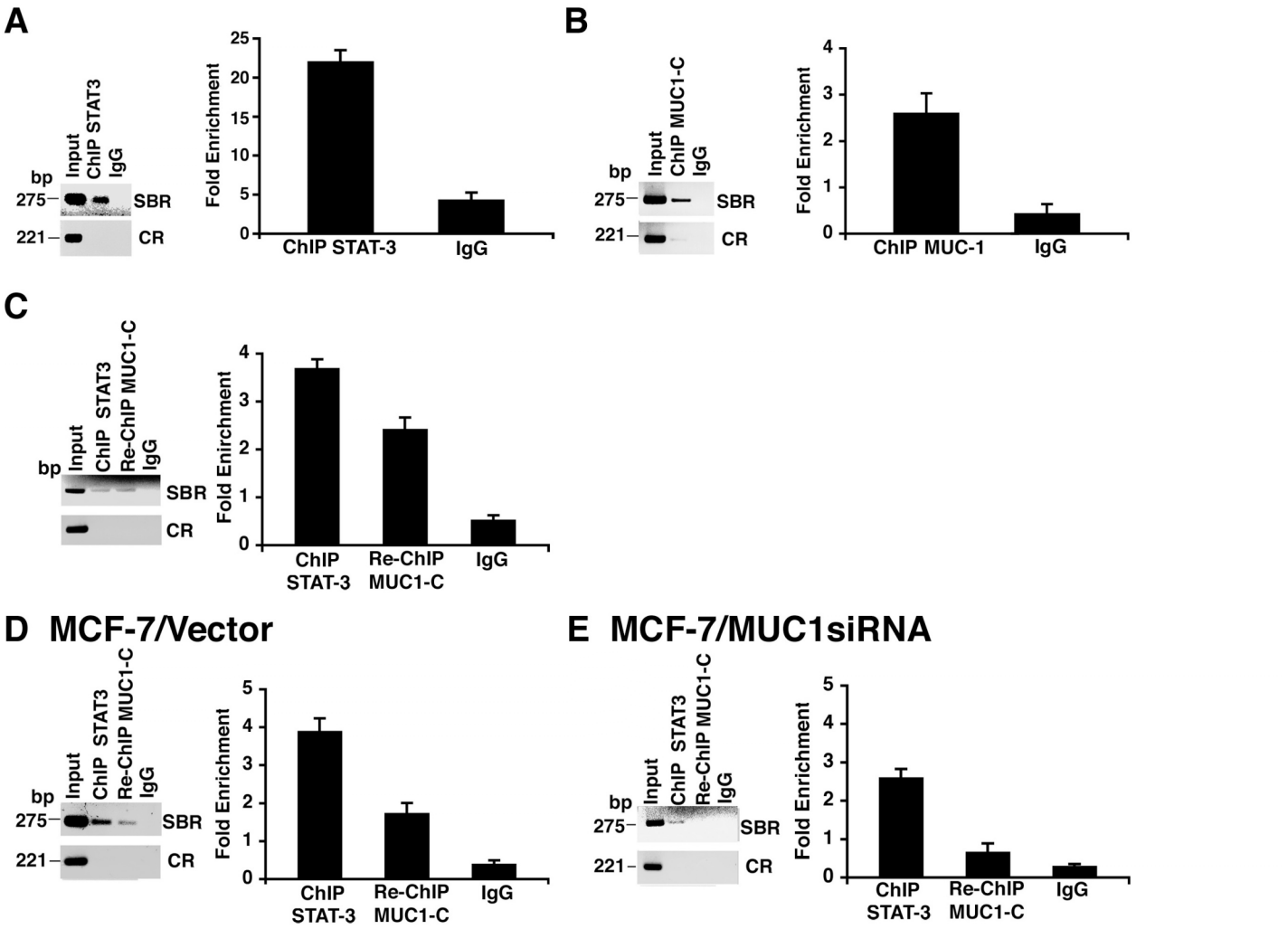
Supplemental Figure Legends

Supplemental Fig. S1

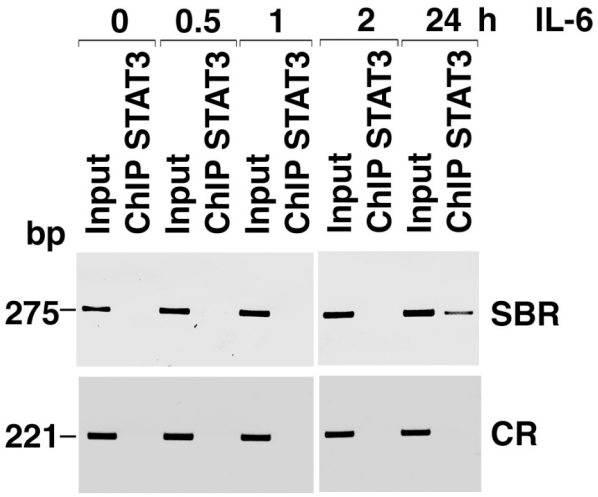


Supplemental Fig. S1. Lysates from WI-38 and MCF7 cells were immunoblotted with the indicated antibodies.



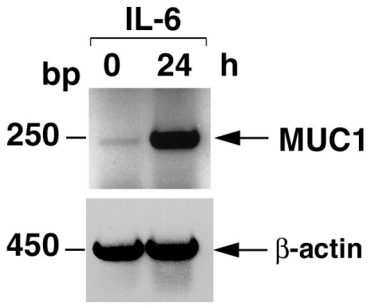
Supplemental Fig. S2. A. Soluble chromatin from MCF-7 cells was immunoprecipitated with anti-STAT3 or an IgG control. Final DNA extractions were amplified by PCR with pairs of primers that cover the STAT binding region (SBR; -559 to -284) and the control region (CR; +4596 to +4817) (left). The precipitated chromatin was also analyzed by qPCR (right). B. Soluble chromatin from MCF-7 cells was immunoprecipitated with anti-MUC1-C or an IgG control and analyzed for *MUC1* promoter SBR and CR sequences (left). The precipitated chromatin was also analyzed by qPCR (right). C. Soluble chromatin from MCF-7 cells was precipitated with anti-STAT3, released, reimmunoprecipitated with anti-MUC1-C and then analyzed for *MUC1* promoter SBR and CR sequences (left). The precipitated chromatin was also analyzed by qPCR (right). D and E. Soluble chromatin from MCF-7/vector (D) and MCF-7/MUC1siRNA (E) cells was immunoprecipitated with anti-STAT3, released, reimmunoprecipiated with anti-MUC1-C and then analyzed for *MUC1* promoter SBR and CR sequences (left).

Supplemental Fig. S3

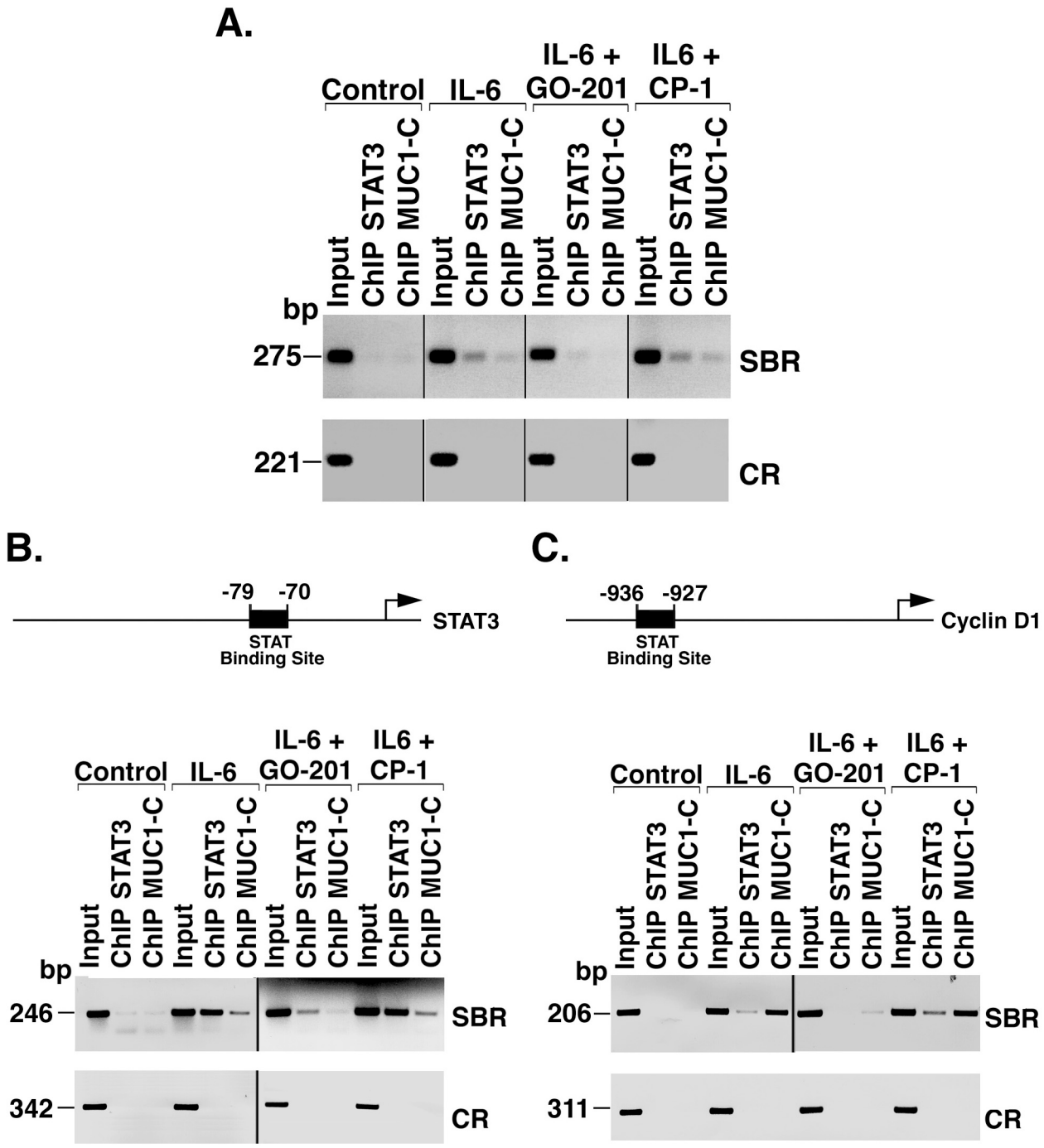


Supplemental Fig. S3. Soluble chromatin from MCF-10A cells stimulated with IL-6 for the indicated times was precipitated with anti-STAT3 and analyzed for *MUC1* promoter SBR and CR sequences.

Supplemental Fig. S4



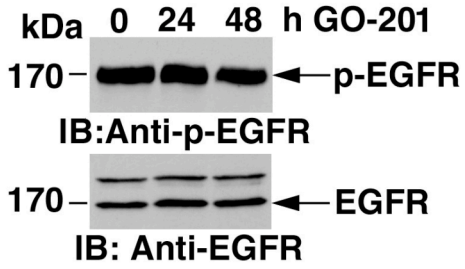
Supplemental Fig. S4. MCF-10A cells were stimulated with IL-6 for 24 h. MUC1 and β-actin mRNA levels were detected by RT-PCR.



Supplemental Fig. S5. A-C. MCF-10A cells were left untreated (Control) and stimulated with IL-6 in the presence of 5 μM GO-201 or CP-1 added each 24 h for 72 h. A. Soluble chromatin was precipitated with anti-STAT3 or anti-MUC1-C and analyzed for *MUC1* promoter SBR and CR sequences. B. Schema of the *STAT3* promoter region with positioning of the STAT binding site. Soluble chromatin was immunoprecipitated with anti-STAT3 or anti-MUC1-C. The final DNA extractions were amplified by

PCR with pairs of primers that cover the STAT binding region (SBR; -316 to -70) and the control region (CR; +5005 to +5347). C. Schema of the cyclin *D1* promoter region with positioning of the STAT binding site. Soluble chromatin was immunoprecipitated with anti-STAT3 or anti-MUC1-C. The final DNA extractions were amplified by PCR with pairs of primers that cover the STAT binding region (SBR; -1045 to -839) and the control region (CR; +2234 to +2545).

Supplemental Figure S6



Supplemental Fig. S6. ZR-75-1 cells were left untreated (Control), and treated with 5 μM GO-201 for 24 and 48 h. Lysates were immunoblotted with anti-p-EGFR and anti-EGFR.