

Title: Supplementary Data 1:

Description: Synthetic URSs OL design (excel file).

Title: Supplementary Data 2:

Description: Raw NGS raw data (excel file).

Title: Supplementary Data 3:

Description: MBO model predictions based on 2098 variants (excel file).

Title: Supplementary Data 4:

Description: Summary of the mHG p-values of all the 41 motifs (excel file).

Title: Supplementary Data 5:

Description: Summary of the mHG p-values of all the 20 motifs containing K and/or M (excel file).

Title: Supplementary Data 6:

Description: Variants used in validation experiments in yeast cells and CHO cells (excel file).

Title: Supplementary Data 7:

Description: Pearson correlation data for the validation sets (excel file)