

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Differentially expressed genes (DeSeq2), pairwise comparisons to RBM20-WT iPSC-CMs, Fig. 1i.

File Name: Supplementary Data 2

Description: All enrichment analyses done with Metascape, excel sheets labelled with respective figure panels.

File Name: Supplementary Data 3

Description: PSI values calculated with the pipeline described in Schafer et al., 2015. All exonic parts are annotated to exons with genomic coordinates indicated.

File Name: Supplementary Data 4

Description: calculated with rMATS statistics for each exon genome-wide, pairwise comparisons to WT. Each sheet has an rMATS output for an indicated pairwise comparison for an indicated event type, used for Supplementary Figure 2 g-h.

File Name: Supplementary Data 5

Description: calculated with rMATS overlaps with Briganti et al., 2020.

File Name: Supplementary Data 6

Description: Mass spectrometry hits (Fig. 1l, Supplementary Fig. 3)

File Name: Supplementary Data 7

Description: Differentially expressed genes (DeSeq2), pairwise comparisons to RBM20-WT expressing iPSC-CMs, Fig. 2d.

File Name: Supplementary Data 8

Description: PSI values calculated with the pipeline described in Schafer et al., 2015. All exonic parts are annotated to exons with genomic coordinates indicated.

File Name: Supplementary Data 9

Description: calculated with rMATS statistics for each exon genome-wide, pairwise comparisons to WT. Each sheet has an rMATS output for an indicated pairwise comparison for indicated event type, used for Supplementary Figure 4 g-h.

File Name: Supplementary Data 10

Description: gRNA and gene statistics from RBM20-WT ICS screen, Fig. 3, Supplementary Fig. 5.

File Name: Supplementary Data 11

Description: gRNA and gene statistics from RBM20-R634Q ICS screen, Supplementary Fig. 6.

File Name: Supplementary Data 12

Description: Normalized (DeSeq2) read counts for hits in HeLa and iPSC-CMs

File Name: Supplementary Data 13

Description: Raw read counts for HeLa and iPSC-CMs

File Name: Supplementary Data 14

Description: Plasmid sequences