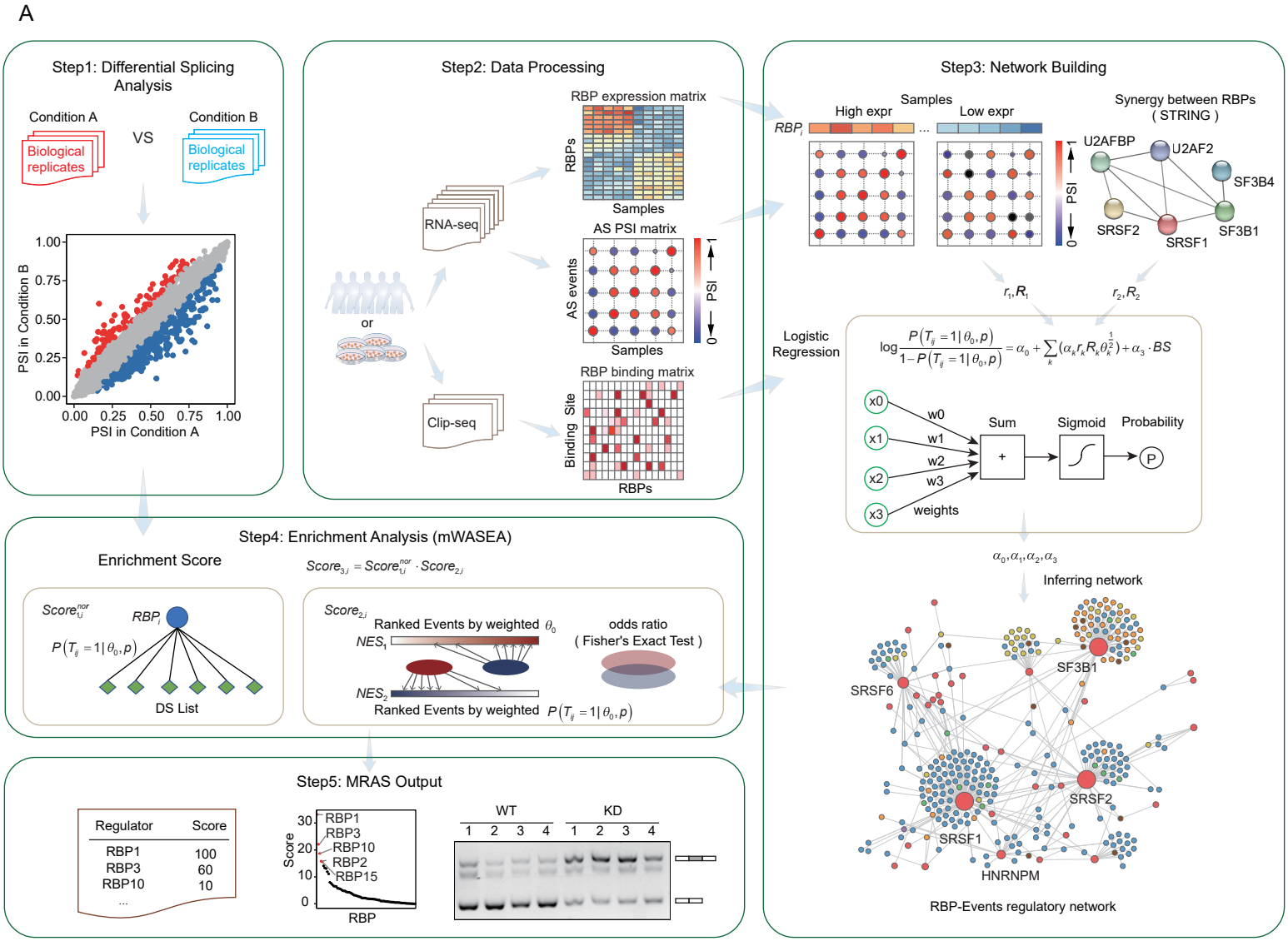
A
Step1: Differential Splicing Analysis
Condition A
Biological replicates
VS
Condition B
Biological replicates
PSI in Condition B
PSI in Condition A
Step2: Data Processing
RNA-seq
or
Clip-seq
RBP expression matrix
RBPs
Samples
AS PSI matrix
AS events
Samples
PSI
RBP binding matrix
Binding Site
RBPs
Step3: Network Building
Samples
High expr
Low expr
Synergy between RBPs (STRING)
U2AFBP
U2AF2
SF3B4
SRSF2
SRSF1
SF3B1
Logistic Regression
Sum
Sigmoid
Probability
weights
Inferring network
SRSF6
SF3B1
SRSF2
SRSF1
HNRNPM
RBP-Events regulatory network
Step4: Enrichment Analysis (mWASEA)
Enrichment Score
DS List
Ranked Events by weighted
odds ratio
(Fisher's Exact Test)
Step5: MRAS Output
Regulator
Score
RBP1 100
RBP3 60
RBP10 10
Score
RBP
WT
KD