

A

Input Data

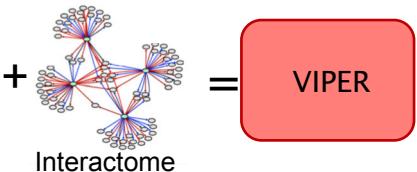
Gene Expression
(\log_2 RPKM)SCNA
(GISTIC
2.0)SNV
(Firehose)Gene
Fusions
(PRADA)PPIs
PrePPI, ...

SCNA: Somatic Copy Number Alteration
SNV: Single Nucleotide Variant
PPI: Protein-Protein Interaction (PrePPI)

Step 1: Preliminary Data Processing

B

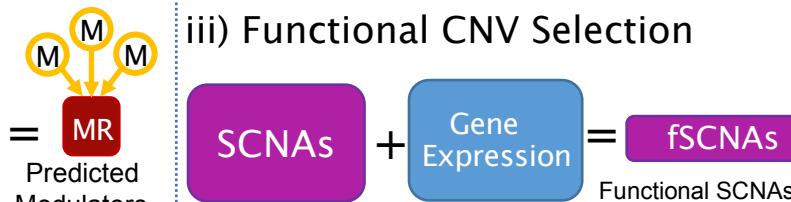
i) Tissue Specific VIPER Analysis



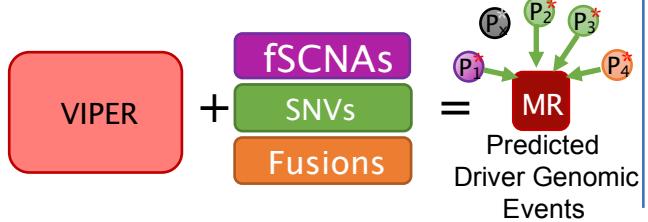
ii) CINDY



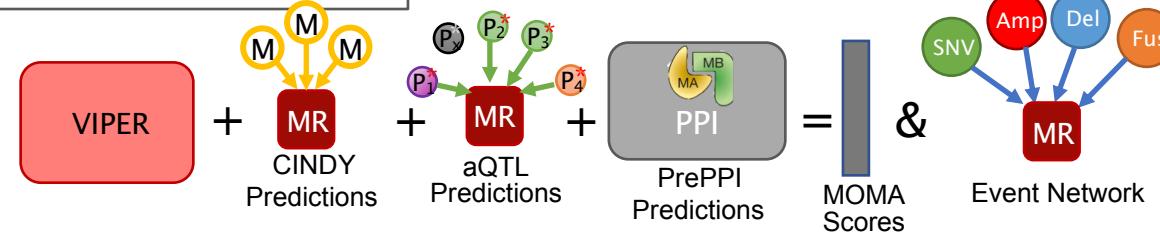
iii) Functional CNV Selection



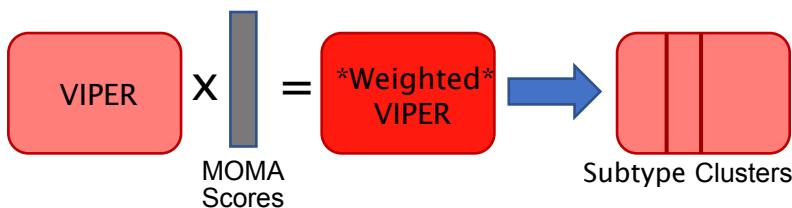
Step 2: aQTL Analysis



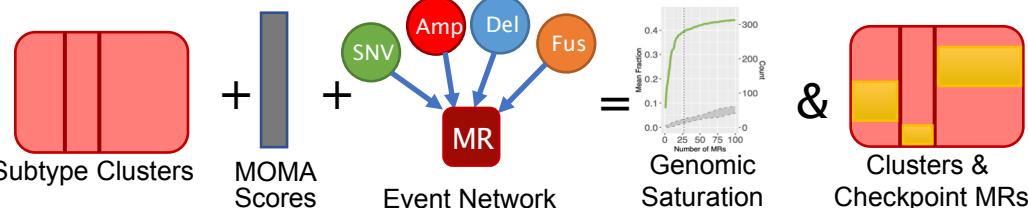
Step 3: Evidence Integration



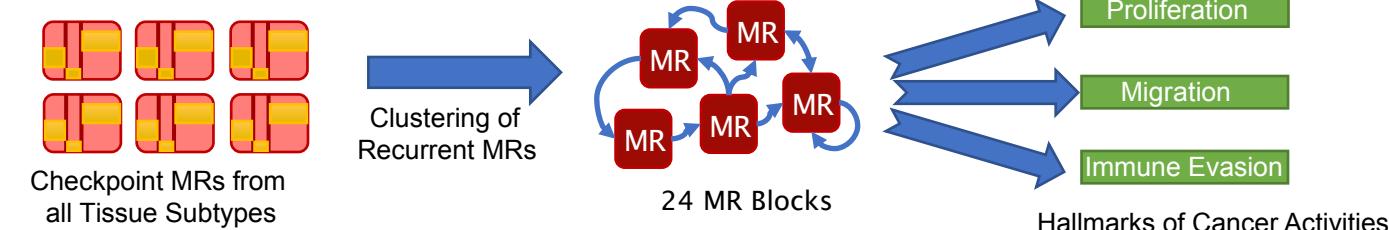
Step 4: Sample Clustering



Step 5: Genomic Saturation and Checkpoint Determination



Step 6: MR Block Generation and Hallmarks of Cancer Enrichment

**Figure S1**