Training

p53 REs with known binding affinity

Matrix from Hamming distance between REs

Multidimensional Scaling

Feature aggregation

Input Features

5 Binding Levels (Response)

116 dimensions

263 REs

Regression RE Model

Validation

10-fold cross-validation

170 predicted

11 predicted

overlapping functional SNPs

Testing

Validated p53 REs (199)

(Jegga et al., Riley et al., Horvath et al., Ma et al.)

Known p53 REs (2026)

(Xie et al., Wei et al., Hearnes et al.)

Putative p53 REs (180) in miR promoters

71 high scoring REs

15 high scoring REs

2 predicted

overlapping functional SNPs