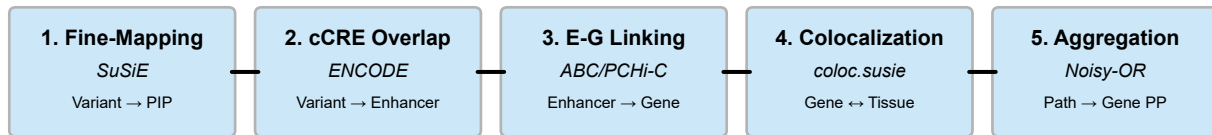
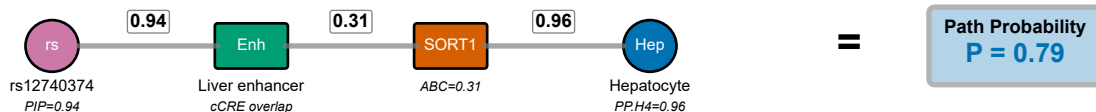


Mechanism Graph Framework for GWAS Gene Prioritization



Example: SORT1 Locus (1p13, LDL-C)



Path Probability = PIP × ABC × PP.H4 = 0.94 × 0.31 × 0.96 ≈ 0.28 (single path)

Final PP = Noisy-OR aggregation across all paths to gene = 0.79

Variant

Enhancer

Gene

Tissue