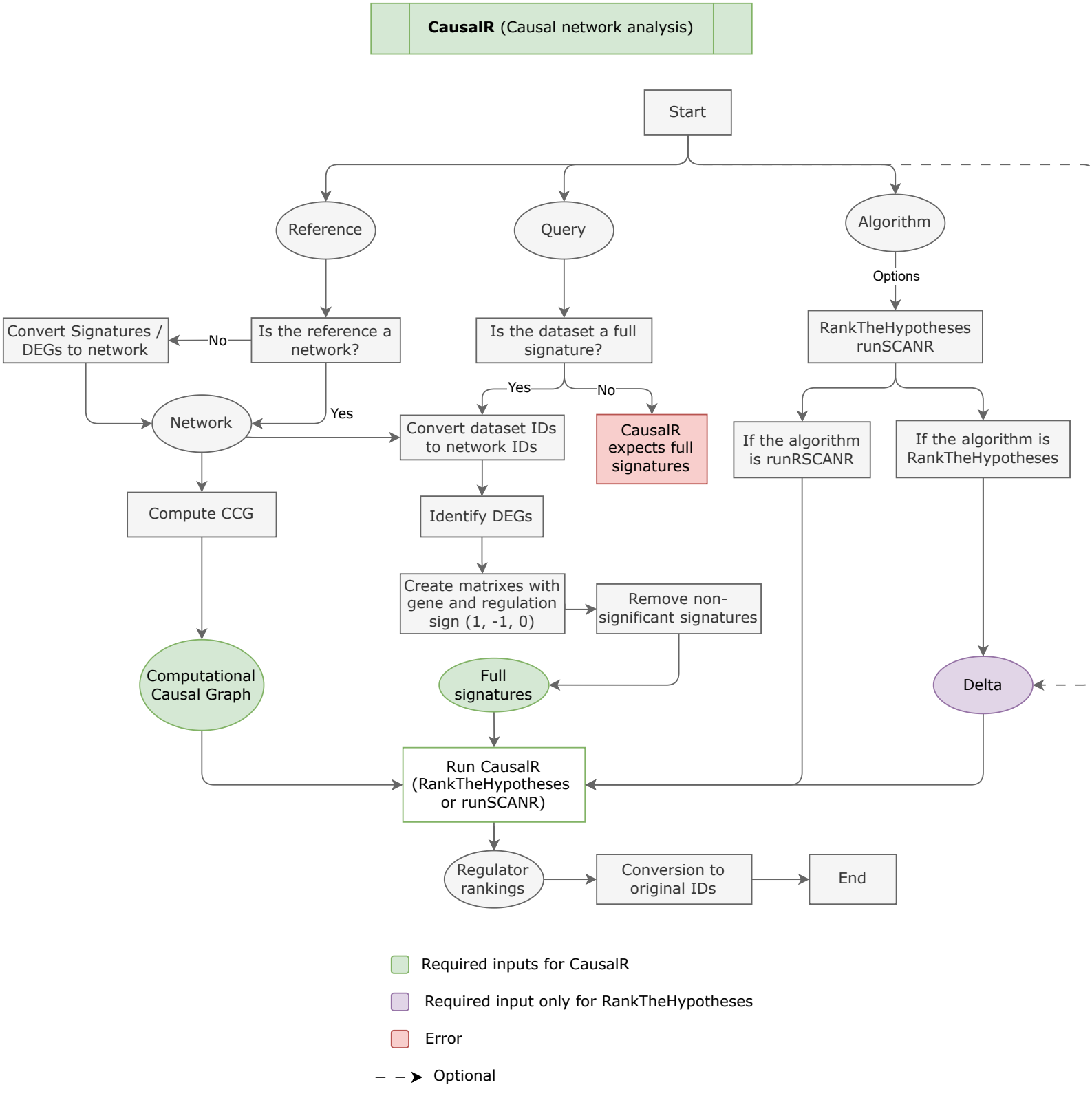
CausalR (Causal network analysis)
Start
Reference
Query
Algorithm
Options
Convert Signatures / DEGs to network
No
Is the reference a network?
Is the dataset a full signature?
RankTheHypotheses runSCANR
Yes
No
Yes
Network
Convert dataset IDs to network IDs
CausalR expects full signatures
If the algorithm is runRSCANR
If the algorithm is RankTheHypotheses
Compute CCG
Identify DEGs
Create matrixes with gene and regulation sign (1, -1, 0)
Remove non-significant signatures
Computational Causal Graph
Full signatures
Delta
Run CausalR (RankTheHypotheses or runSCANR)
Regulator rankings
Conversion to original IDs
End
Required inputs for CausalR
Required input only for RankTheHypotheses
Error
Optional