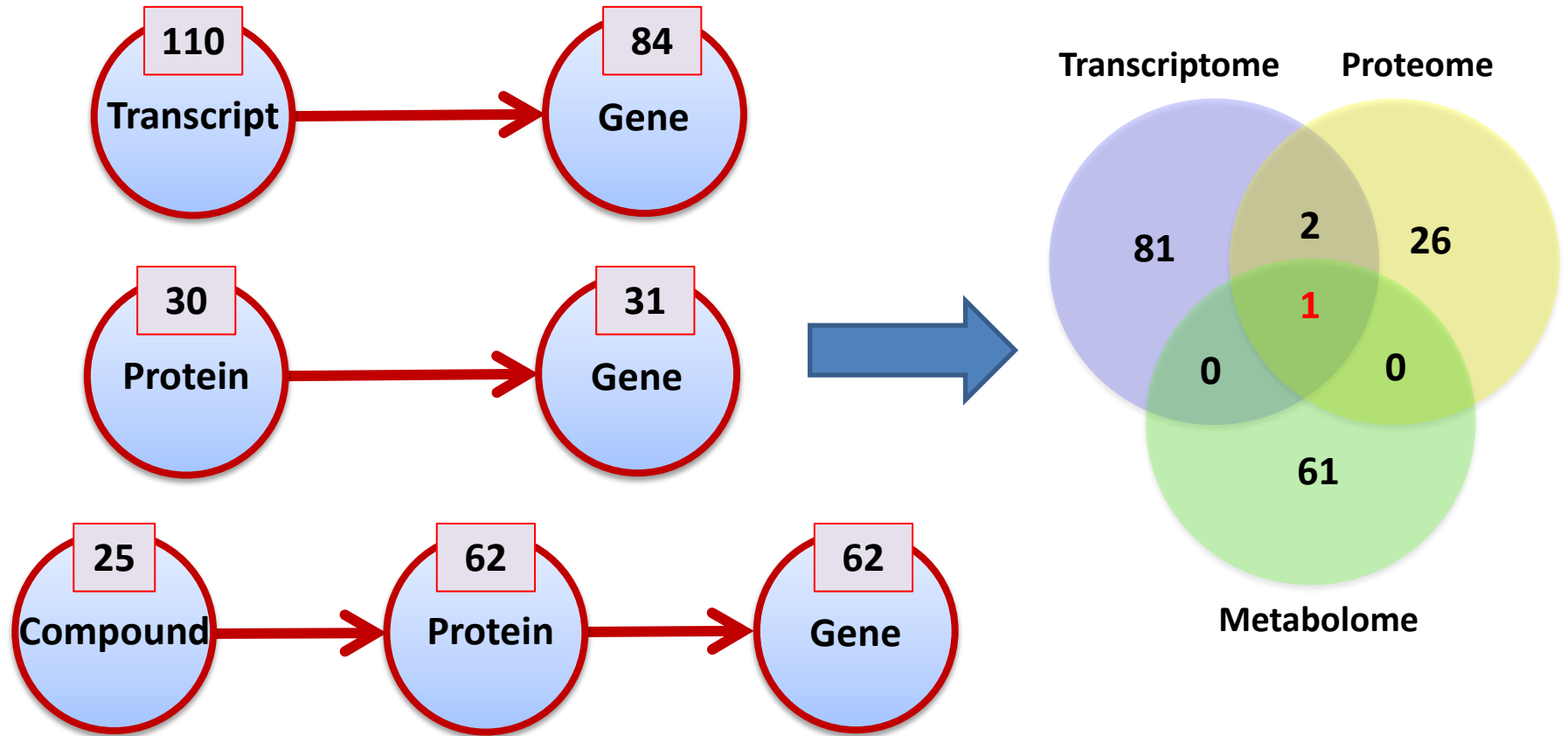


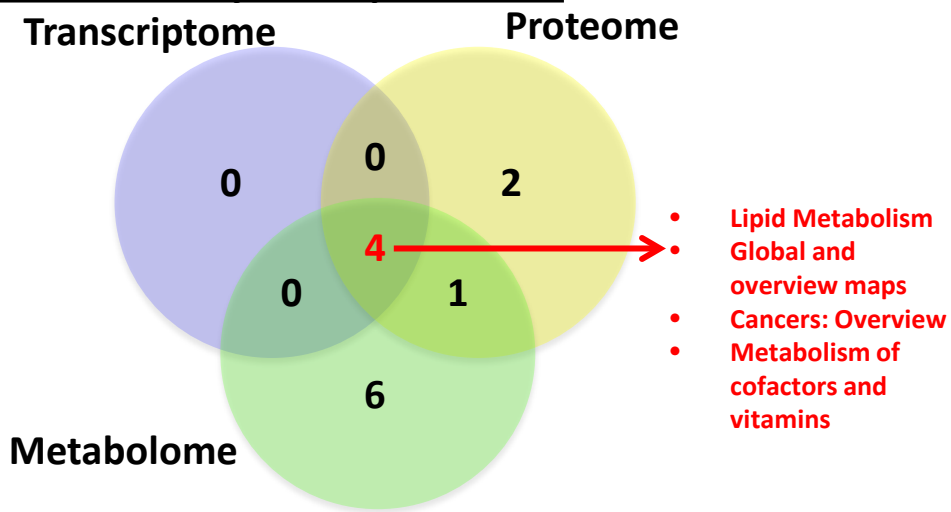
Supplementary Figure 1: Trans-omics data analysis with TargetMine- usage example

Trans-omics gene set conversion, comparison and overlap

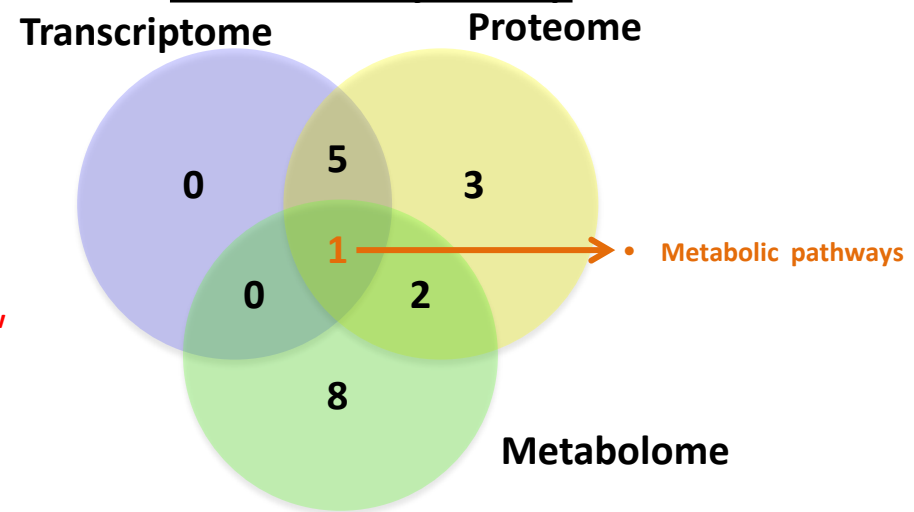


Gene Name	Gene Symbol	Transcript FC	Protein FC	Metabolite FC
carboxylesterase 2A	Ces2a	0.591	0.657	-
cysteine sulfinic acid decarboxylase	Csad	0.544	0.666	0.643
cytochrome P450, family 3, subfamily a, polypeptide 11	Cyp3a11	0.564	0.603	-

KEGG Pathway overlap- Subclass



KEGG Pathway overlap



KEGG Pathway overlap and overlapping genes

KEGG Pathway	KEGG Pathway sub-class	Transcriptome	Proteome	Metabolome
Metabolic pathways	Global and overview maps	Csad	Csad	Csad
Linoleic acid metabolism	Lipid Metabolism	Cyp3a11	Cyp3a11	-
Retinol metabolism	Metabolism of cofactors and vitamins	Cyp3a11	Cyp3a11	-
Steroid hormone biosynthesis	Lipid Metabolism	Cyp3a11	Cyp3a11	-
Chemical carcinogenesis	Cancers: overview	Cyp3a11	Cyp3a11	-
Drug metabolism- other enzymes		-	5 genes (No gene overlap)	4 genes (No gene overlap)