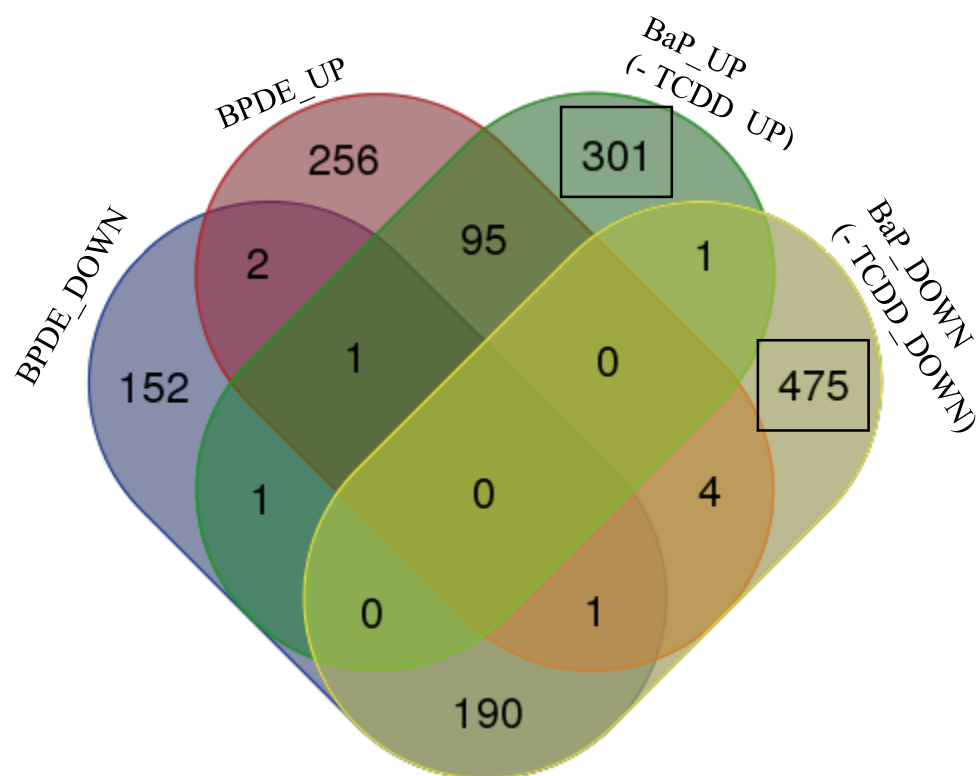


1. Overlapping genes between BaP and BPDE after subtraction of TCDD gene signature (DEGs with same direction of expression)



1. Pathway analysis from genes exclusively regulated in BaP treatment

Pathway	q-value	Database
Up-regulated		
Direct p53 effectors	0.000344	PID
NRF2 pathway	0.0013	Wikipathways
Oxidative stress	0.00459	Wikipathways
Nuclear receptors meta-pathway	0.00507	Wikipathways
Apoptosis modulation and signaling	0.0065	Wikipathways
P53 signaling pathway	0.00797	KEGG
Validated transcriptional targets of deltaNp63 isoforms	0.00797	PID
Osteoclast differentiation	0.00823	KEGG
Down-regulated		
Metabolism	4.03E-07	Reactome
Cholesterol biosynthesis	5.89E-07	Reactome
Cholesterol Biosynthesis	1.54E-05	Wikipathways
SREBF and miR33 in cholesterol and lipid homeostasis	5.15E-05	Wikipathways
Glycine, serine and threonine metabolism - Homo sapiens (human)	6.88E-05	KEGG
Steroid biosynthesis - Homo sapiens (human)	6.88E-05	KEGG
Metabolism of amino acids and derivatives	0.000249	Reactome
Alanine, aspartate and glutamate metabolism - Homo sapiens (human)	0.000265	KEGG
Metabolism of lipids and lipoproteins	0.000334	Reactome
Nitrogen metabolism - Homo sapiens (human)	0.000402	KEGG
Amino acid synthesis and interconversion (transamination)	0.000402	Reactome
Terpenoid backbone biosynthesis - Homo sapiens (human)	0.00116	KEGG
Activation of gene expression by SREBF (SREBP)	0.00215	Reactome
Glyoxylate and dicarboxylate metabolism - Homo sapiens (human)	0.00258	KEGG
Butanoate metabolism - Homo sapiens (human)	0.00307	KEGG
Regulation of cholesterol biosynthesis by SREBP (SREBF)	0.0051	Reactome
SREBP signalling	0.00546	Wikipathways

Trans-sulfuration and one carbon metabolism	0.00663	Wikipathways
Aurora A signaling	0.00663	PID
Valine, leucine and isoleucine degradation - Homo sapiens (human)	0.00668	KEGG
Endochondral Ossification	0.00683	Wikipathways
Activation of Gene Expression by SREBP (SREBF)	0.00716	Wikipathways
Signaling by Wnt	0.00736	Reactome
