

Table S1. List of Canonical pathways being altered in CD151-null mammary tumors (wildtype vs null)

Rank	Inguinity Canonical Pathways	B-H p-Value (-log)	Ratio	z-score	Genes
1	Acute Phase Response Signaling	3.5E00	4.76E-02	NaN	SAA1,C4A/C4B,HP,TF, C3,CP,CRABP1,ITIH2
2	LXR/RXR Activation	2.59E00	4.96E-02	-1.633	SAA1,C4A/C4B,CD36,TF,C3,CD14
3	Macropinocytosis Signaling	1.79E00	5.88E-02	NaN	PDGFD,CD14,MET,HGF
4	FXR/RXR Activation	1.79E00	4E-02	NaN	SAA1,C4A/C4B,TF,C3,FBP1
5	Hepatic Fibrosis / Hepatic Stellate Cell Activation	1.17E00	2.76E-02	NaN	PDGFD,MMP2,CD14,MET,HGF
6	VDR/RXR Activation	7.47E-01	3.9E-02	NaN	CD14,SEMA3B,SPP1
7	The Epithelial-Mesenchymal Transition Pathway	5.59E-01	2.2E-02	NaN	PDGFD,MMP2,MET,HGF
8	Complement System	5.59E-01	5.56E-02	NaN	C4A/C4B,C3
9	Axonal Guidance Signaling	4.89E-01	1.41E-02	NaN	ARHGEF6,PDGFD,MMP2, ADAM23,SEMA3B,MET
10	LPS/L-1 Mediated Inhibition of RXR Function	4.89E-01	1.92E-02	NaN	FABP3,ALDH1A1,CD14,FABP5
11	Chronic Obstructive Pulmonary Disease	3.34E-01	1.25E-01	NaN	MMP2
12	Remodeling of Epithelial Adherens Junctions	3.34E-01	3.03E-02	NaN	MET,HGF
13	Renal Cell Carcinoma Signaling	3.34E-01	2.9E-02	NaN	MET,HGF
14	Histamine Degradation	3.34E-01	8.33E-02	NaN	ALDH1A1
15	T Cell and B Cell Signaling in Rheumatoid Arthritis	3.34E-01	2.47E-02	NaN	TRG,SPP1
16	Guanosine Nucleotides Degradation III	3.34E-01	7.69E-02	NaN	XDH
17	Clathrin-mediated Endocytosis Signaling	3.34E-01	1.63E-02	NaN	TF,PDGFD,MET
18	TR/RXR Activation	3.34E-01	2.35E-02	NaN	HP,THRSP
19	FGF Signaling	3.34E-01	2.35E-02	NaN	MET,HGF
20	Urate Biosynthesis/Inosine 5'-phosphate Degradation	3.34E-01	7.14E-02	NaN	XDH
21	PAK Signaling	3.34E-01	2.27E-02	NaN	ARHGEF6,PDGFD
22	$\gamma$ -glutamyl Cycle	3.34E-01	6.67E-02	NaN	ANPEP
23	Fatty Acid $\alpha$ -oxidation	3.34E-01	6.67E-02	NaN	ALDH1A1
24	Oxidative Ethanol Degradation III	3.34E-01	6.67E-02	NaN	ALDH1A1
25	Adenosine Nucleotides Degradation II	3.34E-01	6.25E-02	NaN	XDH
26	Putrescine Degradation III	3.34E-01	6.25E-02	NaN	ALDH1A1
27	Tryptophan Degradation X (Mammalian, via Tryptamine)	3.34E-01	5.88E-02	NaN	ALDH1A1
28	Paxillin Signaling	3.34E-01	2.04E-02	NaN	ARHGEF6,ITGA8
29	Actin Cytoskeleton Signaling	3.34E-01	1.43E-02	NaN	ARHGEF6,PDGFD,CD14
30	Purine Nucleotides Degradation II (Aerobic)	3.34E-01	5.26E-02	NaN	XDH
31	Ethanol Degradation IV	3.34E-01	5.26E-02	NaN	ALDH1A1
32	HGF Signaling	3.32E-01	1.92E-02	NaN	MET,HGF