A

NAME	SIZE	ES	NES	NOM p-val	FDR q-val
HALLMARK_INTERFERON_GAMMA_RESPONSE	162	0.82818174	3.769457	0.0	0.0
HALLMARK_INTERFERON_ALPHA_RESPONSE	80	0.822985	3.3652632	0.0	0.0
HALLMARK_ALLOGRAFT_REJECTION	131	0.75538087	3.3276742	0.0	0.0
HALLMARK_INFLAMMATORY_RESPONSE	119	0.75865096	3.313479	0.0	0.0
HALLMARK_TNFA_SIGNALING_VIA_NFKB	146	0.6971366	3.1485534	0.0	0.0
HALLMARK_IL6_JAK_STAT3_SIGNALING	64	0.7630497	3.0116842	0.0	0.0
HALLMARK_COMPLEMENT	110	0.6383073	2.7192578	0.0	0.0
HALLMARK_COAGULATION	69	0.6645757	2.6630385	0.0	0.0
HALLMARK_KRAS_SIGNALING_UP	125	0.59899926	2.6365316	0.0	0.0
HALLMARK_IL2_STAT5_SIGNALING	141	0.5870388	2.6272225	0.0	0.0
HALLMARK_P53_PATHWAY	159	0.52139574	2.3485548	0.0	0.0
HALLMARK_EPITHELIAL_MESENCHYMAL_TRANSITION	123	0.5310159	2.320914	0.0	0.0
HALLMARK_APOPTOSIS	128	0.50832146	2.2347293	0.0	0.0
HALLMARK_REACTIVE_OXIGEN_SPECIES_PATHWAY	38	0.5886307	2.0312104	0.0	1.8083333E-4
HALLMARK_MYOGENESIS	123	0.4118246	1.8249516	0.0	0.0013806964
HALLMARK_APICAL_JUNCTION	120	0.40743148	1.7790085	0.0	0.0020232992
HALLMARK_TGF_BETA_SIGNALING	45	0.49098754	1.7678022	0.0	0.0023420476
HALLMARK_APICAL_SURFACE	23	0.57444316	1.7604934	0.0062240665	0.002388884
HALLMARK_UV_RESPONSE_UP	110	0.40726253	1.7577766	0.0	0.0023111408
HALLMARK_XENOBIOTIC_METABOLISM	117	0.39931688	1.7152885	0.0	0.0031553935
HALLMARK_HYPOXIA	146	0.37660903	1.6752298	0.0	0.0043846117
HALLMARK_ANGIOGENESIS	25	0.50647223	1.6348407	0.015151516	0.0061984058
HALLMARK_PI3K_AKT_MTOR_SIGNALING	84	0.3574547	1.4587454	0.015021459	0.027712682
HALLMARK_ESTROGEN_RESPONSE_EARLY	118	0.32281712	1.3854592	0.039447732	0.048783235

B

NAME	SIZE	ES	NES	NOM p-val	FDR q-val
HALLMARK_E2F_TARGETS	171	-0.717617	-3.3438206	0.0	0.0
HALLMARK_G2M_CHECKPOINT	176	-0.6518687	-3.03814	0.0	0.0
HALLMARK_MYC_TARGETS_V1	176	-0.5908284	-2.7586758	0.0	0.0
HALLMARK_MYC_TARGETS_V2	53	-0.61427283	-2.330544	0.0	0.0
HALLMARK_MITOTIC_SPINDLE	181	-0.42779303	-2.0100524	0.0	2.6190476E-4
HALLMARK_SPERMATOGENESIS	53	-0.48224705	-1.8455726	0.0018832391	0.0012595418
HALLMARK_DNA_REPAIR	121	-0.3549868	-1.5644363	0.0	0.016240396
HALLMARK_MTORC1_SIGNALING	186	-0.32990193	-1.5464827	0.0	0.016532017
HALLMARK_FATTY_ACID_METABOLISM	109	-0.33336532	-1.442712	0.015503876	0.040354993

Supplemental table S1. GSEA results comparing ACT-treated versus non-treated B16F1 melanomas early during treatment.
(A) Gene sets with positive enrichments scores (= up in ACT-treated). **(B)** Gene sets with negative enrichments scores (= down in ACT-treated). NOM p-val=0.0 corresponds to p<0.001. (N)ES: (normalized) enrichments score. FDR; false discovery rate.