Canonical Pathways	CT-2A Vehicle Vs. D2C7 Day 12 P 0.05 FC 1.5 - 2021-08-27 02:05 PM	CT-2A Vehicle Vs. CD40 Day 12 P 0.05- 2021-08-27 02:01 PM	CT-2A Vehicle Vs. D2C7+CD40 Day 12 p 0.05 FC 1.5 - 2021-08-27 02:08 PM
Cell Cycle Control of Chromosomal Replication	-5.099	0	-5.099
Coronavirus Pathogenesis Pathway	3.413	0	2.294
MSP-RON Signaling In Macrophages Pathway	2.673	-2	-0.816
PD-1, PD-L1 cancer immunotherapy pathway	1.964	-2	0.378
Th1 Pathway	-2.711	2	1.633
Phagosome Formation	-3.108	3.606	-2.188
B Cell Receptor Signaling	-0.707	2	-1.89
Systemic Lupus Erythematosus In B Cell Signaling Pathway	-2.401	2.333	-0.894
Breast Cancer Regulation by Stathmin1	-1.778	2.236	-1.82
IL-7 Signaling Pathway	-2.309	2.236	-2.121
HOTAIR Regulatory Pathway	-2.556	0	-3.9
BEX2 Signaling Pathway	-3.051	0	-3.873
Osteoarthritis Pathway	-3.53	0	-4.2
Kinetochore Metaphase Signaling Pathway	-3.536	0	-3.536
MSP-RON Signaling In Cancer Cells Pathway	-2.84	0	-3.441
Estrogen-mediated S-phase Entry	-3.051	0	-3.207
NER (Nucleotide Excision Repair, Enhanced Pathway)	-3.162	0	-3.162
Hepatic Fibrosis Signaling Pathway	-3.212	0	-3.124
Regulation Of The Epithelial Mesenchymal Transition By Growth Factors Pathway	-2.828	0	-2.683
PI3K/AKT Signaling	-2.646	0	-2.646
BER (Base Excision Repair) Pathway	-2.828	0	-3.162
Pyridoxal 5'-phosphate Salvage Pathway	-2.828	0	-2.828
Colorectal Cancer Metastasis Signaling	-2.744	0	-2.921
GP6 Signaling Pathway	-2.828	0	-2.982
Factors Promoting Cardiogenesis in Vertebrates	-1.387	0	-2.84
Retinoic acid Mediated Apoptosis Signaling	-3.317	0	-2
Necroptosis Signaling Pathway	-2.683	0	-1.265
IL-15 Production	-2.985	0	-1.291
Role of PKR in Interferon Induction and Antiviral Response	-2.5	0	-1.508
Leukocyte Extravasation Signaling	-2.5	0	-2.111
p38 MAPK Signaling	-2.53	0	-1.897
Salvage Pathways of Pyrimidine Ribonucleotides	-2.496	0	-1.732
Agrin Interactions at Neuromuscular Junction	-2	0	-2
Tumor Microenvironment Pathway	-2.117	0	-2.294
PAK Signaling	-2.121	0	-2.333
Cardiac Hypertrophy Signaling (Enhanced)	-2.412	0	-2.694
Mitotic Roles of Polo-Like Kinase	-2.309	0	-2.496
Cyclins and Cell Cycle Regulation	-2.357	0	-2.357
Small Cell Lung Cancer Signaling	-2.449	0	-2.449
Neuroinflammation Signaling Pathway	-2.722	0.816	-0.6
Role of Hypercytokinemia/hyperchemokinemia in the Pathogenesis of Influenza	-3.545	0	-0.333
Interferon Signaling	-3.051	0	-0.447
Crosstalk between Dendritic Cells and Natural Killer Cells	-3	0	0
Inhibition of Angiogenesis by TSP1	0	0	-2
Tumoricidal Function of Hepatic Natural Killer Cells	0	0	-2
PI3K Signaling in B Lymphocytes	-1.414	0	-0.447
Activation of IRF by Cytosolic Pattern Recognition Receptors	-1.508	0	0
Role of IL-17F in Allergic Inflammatory Airway Diseases	-1.342	0	0
VDR/RXR Activation	-1.134	0	0
Glycine Betaine Degradation	-1	0	0
iNOS Signaling	-1	0	0
Role of Pattern Recognition Receptors in Recognition of Bacteria and Viruses	-2.121	0	0
UVA-Induced MAPK Signaling	-2	0	0
dTMP De Novo Biosynthesis	-2	0	0
IL-15 Signaling	-2.236	0	-1
HER-2 Signaling in Breast Cancer	-2.4	0	-0.894
TREM1 Signaling	-2	0	-0.632
eNOS Signaling	-1.897	0	-0.5
Neuroprotective Role of THOP1 in Alzheimer's Disease	-1.414	-1	-1
WNT/β-catenin Signaling	-0.471	0	-1.342
STAT3 Pathway	-0.816	0	-0.707
ATM Signaling	-0.5	0	-0.943
Pyrimidine Deoxyribonucleotides De Novo Biosynthesis I	-1.134	0	-0.816
Cell Cycle Regulation by BTG Family Proteins	-1.134	0	-1.134
Role of BRCA1 in DNA Damage Response	-0.894	0	-1.147
IL-17A Signaling in Gastric Cells	-1	0	-1
Phospholipases	-1	0	-1
Apelin Liver Signaling Pathway	-1.342	0	-2.236
Thyroid Cancer Signaling	-0.905	0	-1.604
Role of MAPK Signaling in Promoting the Pathogenesis of Influenza	-0.816	0	-1.508
Glioblastoma Multiforme Signaling	-1.147	0	-1.886
Regulation Of The Epithelial Mesenchymal Transition In Development Pathway	-1.069	0	-1.941
Acute Myeloid Leukemia Signaling	-1	0	-1.89
Melanoma Signaling	-1.342	0	-1.342
HGF Signaling	-1.265	0	-1.508
Aryl Hydrocarbon Receptor Signaling	-1.279	0	-1.528
HIF1α Signaling	-1.606	0	-0.943
Actin Cytoskeleton Signaling	-1.604	0	-1.155
Non-Small Cell Lung Cancer Signaling	-1.633	0	-1.342
p70S6K Signaling	-1.89	0	-1.633
ILK Signaling	-1.698	0	-1.698
ERK5 Signaling	-1.633	0	-1.89
Pancreatic Adenocarcinoma Signaling	-1.604	0	-1.941
PEDF Signaling	-2.121	0	-1.667
Ovarian Cancer Signaling	-1.89	0	-1.134
Natural Killer Cell Signaling	-2.117	0	-1.291
Th2 Pathway	-1.886	0	-1.414
Sperm Motility	-1.897	0	-1.414
Cell Cycle: G1/S Checkpoint Regulation	1.604	0	1.807
Endocannabinoid Cancer Inhibition Pathway	1.886	0	1.528
Senescence Pathway	0.48	0	1.406
Inhibition of Matrix Metalloproteases	1.414	0	1.134
Semaphorin Neuronal Repulsive Signaling Pathway	0.832	0	1.069
Role of IL-17A in Psoriasis	1	0	1.342
Cell Cycle: G2/M DNA Damage Checkpoint Regulation	1	0	1.213
IL-17 Signaling	-1.134	0	0.894
Differential Regulation of Cytokine Production in Intestinal Epithelial Cells by IL-17A and IL-17F	-0.707	0	1.342
Differential Regulation of Cytokine Production in Macrophages and T Helper Cells by IL-17A and IL-17F	-0.378	0	1
FAT10 Cancer Signaling Pathway	-0.378	0	1
SPINK1 Pancreatic Cancer Pathway	-0.447	0	0.707
Pyrimidine Ribonucleotides De Novo Biosynthesis	-0.447	0	0.447
Neurotrophin/TRK Signaling	0.816	0	-0.378

Regulation of Cellular Mechanics by Calpain Protease	-0.302	0	-0.632
Intrinsic Prothrombin Activation Pathway	0	0	-0.816
Role of WNT/GSK-3β Signaling in the Pathogenesis of Influenza	0.378	0	-0.816
Basal Cell Carcinoma Signaling	0.302	0	-1.155
PCP (Planar Cell Polarity) Pathway	0.378	0	-1.134
CDK5 Signaling	0.707	0	0.333
Acute Phase Response Signaling	0.302	0	0.832
Epithelial Adherens Junction Signaling	0.302	0	0.535
Role of CHK Proteins in Cell Cycle Checkpoint Control	0.535	0	0.535
IL-6 Signaling	-0.632	0	0
MIF Regulation of Innate Immunity	-0.378	0	0
Toll-like Receptor Signaling	-0.447	0	0
CSDE1 Signaling Pathway	0	0	-0.378
p53 Signaling	0	0	-0.258
Caveolar-mediated Endocytosis Signaling	0	0	0
Glucocorticoid Receptor Signaling	0	0	0
GADD45 Signaling	0	0	0
Calcium Transport I	0	0	0
Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis	0	0	0
Folate Polyglutamylation	0	0	0
Chronic Myeloid Leukemia Signaling	0	0	0
MSP-RON Signaling Pathway	0	0	0
Acetone Degradation I (to Methylglyoxal)	0	0	0
IL-10 Signaling	0	0	0
Tetrapyrrole Biosynthesis II	0	0	0
Axonal Guidance Signaling	0	0	0
Bladder Cancer Signaling	0	0	0
Antigen Presentation Pathway	0	0	0
Superpathway of Serine and Glycine Biosynthesis I	0	0	0
Th1 and Th2 Activation Pathway	0	0	0
Regulation of the Epithelial-Mesenchymal Transition Pathway	0	0	0
Hereditary Breast Cancer Signaling	0	0	0
Hepatic Fibrosis / Hepatic Stellate Cell Activation	0	0	0
Granzyme B Signaling	0	0	0
Complement System	0	0	0
Role of p14/p19ARF in Tumor Suppression	0	0	0
Phagosome Maturation	0	0	0
Molecular Mechanisms of Cancer	0	0	0
Mismatch Repair in Eukaryotes	0	0	0
DNA Double-Strand Break Repair by Homologous Recombination	0	0	0
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	0	0	0
Glycine Cleavage Complex	0	0	0
Human Embryonic Stem Cell Pluripotency	0	0	0
Glutathione-mediated Detoxification	0	0	0
Role of Cytokines in Mediating Communication between Immune Cells	0	0	0
Granulocyte Adhesion and Diapedesis	0	0	0
Pathogenesis of Multiple Sclerosis	0	0	0
Bupropion Degradation	0	0	0
Glycine Biosynthesis I	0	0	0
Role of JAK1 and JAK3 in γc Cytokine Signaling	0	0	0
IL-4 Signaling	0	0	0
Airway Pathology in Chronic Obstructive Pulmonary Disease	0	0	0
Agranulocyte Adhesion and Diapedesis	0	0	0
Catecholamine Biosynthesis	0	0	0
Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis	0	0	0
DNA damage-induced 14-3-3σ Signaling	0	0	0
Role of NANOG in Mammalian Embryonic Stem Cell Pluripotency	0	0	0
Role of OCT4 in Mammalian Embryonic Stem Cell Pluripotency	0	0	0
Role of Tissue Factor in Cancer	0	0	0
Coagulation System	0	0	0
Glutathione Redox Reactions I	0	0	0
Sonic Hedgehog Signaling	0	0	0
Atherosclerosis Signaling	0	0	0
Iron homeostasis signaling pathway	0	0	0
Folate Transformations I	0	0	0
Hematopoiesis from Multipotent Stem Cells	0	0	0
B Cell Development	0	0	0
Communication between Innate and Adaptive Immune Cells	0	0	0
FcγRIIB Signaling in B Lymphocytes	0	0	0
Primary Immunodeficiency Signaling	0	0	0
IL-17A Signaling in Fibroblasts	0	0	0
Glioma Signaling	0	0	0

	CT-2A Vehicle Vs. D2C7	CT-2A Vehicle Vs. CD40	CT-2A Vehicle Vs. D2C7+CD40
Coronavirus Pathogenesis Pathway	3.413	0	2.294
Endocannabinoid Cancer Inhibition Pathway	1.886	0	1.528
Cell Cycle: G1/S Checkpoint Regulation	1.604	0	1.807
Inhibition of Matrix Metalloproteases	1.414	0	1.134
Role of IL-17A in Psoriasis	1	0	1.342
Cell Cycle: G2/M DNA Damage Checkpoint Regulation	1	0	1.213
Semaphorin Neuronal Repulsive Signaling Pathway	0.832	0	1.069
Senescence Pathway	0.48	0	1.406
Acute Phase Response Signaling	0.302	0	0.832
Role of CHK Proteins in Cell Cycle Checkpoint Control	0.535	0	0.535
CDK5 Signaling	0.707	0	0.333
Th1 Pathway	-2.711	2	1.633
Epithelial Adherens Junction Signaling	0.302	0	0.535
Differential Regulation of Cytokine Production in Intestinal Epithelial Cells by IL-17A and IL-17F	-0.707	0	1.342
Differential Regulation of Cytokine Production in Macrophages and T Helper Cells by IL-17A and IL-17F	-0.378	0	1
FAT10 Cancer Signaling Pathway	-0.378	0	1
Neurotrophin/TRK Signaling	0.816	0	-0.378
PD-1, PD-L1 cancer immunotherapy pathway	1.964	-2	0.378
SPINK1 Pancreatic Cancer Pathway	-0.447	0	0.707
Pyrimidine Ribonucleotides De Novo Biosynthesis	-0.447	0	0.447

"N/A" values were changed to 0. The z scores of each row were summed, then the summed values were ranked from highest to lowest. A heatmap of the rows containing the top 20 summed values was created using GraphPad Prisim version 9.

Genes in the Inhibition of Matrix Metalloproteases network	CT-2A Vehicle Vs. D2C7 Day 12 P 0.05 FC 1.5 - 2021-08-27 02:05 PM	CT-2A Vehicle Vs. CD40 Day 12 P 0.05- 2021-08-27 02:01 PM	CT-2A Vehicle Vs. D2C7+CD40 Day 12 p 0.05 FC 1.5 - 2021-08-27 02:08 PM
MMP3	1.832390522	0.529567399	2.04223505
TFPI2	1.602753888	0	1.247015981
MMP25	-0.092629137	1.401897546	0.485695855
MMP17	0.991029693	0.209358474	0.334037636
MMP24	0.748174324	0.137662912	0.45839687
TIMP1	0.505793467	-0.655316351	0.896339202
A2M	0.571895367	-0.307945601	0.413246942
TIMP4	-0.016009114	0.165030811	0.277574993
MMP15	-0.146494638	-0.045228858	0.362946022
TIMP2	-0.130210425	0.067297628	0.142889759
MMP21	-0.1337567	0.226207079	-0.072665804
MMP19	-0.017714457	0.030110663	-0.133859111
ADAM10	-0.254745255	-0.079581192	-0.322809269
MMP16	-0.195211986	-0.176756847	-0.411612606
ADAM12	0.020047573	-0.212069653	-0.629229064
RECK	-0.237246799	-0.257345558	-0.446258535
MMP23B	-0.345327867	0.00830649	-0.756364272
SDC2	-0.669188534	-0.31850691	-0.643243134
MMP8	-0.51216291	-1.201606159	0
ADAM17	-0.958611696	-0.089151026	-0.797143276
LRP1	-0.735371727	-0.43085335	-0.783911519
MMP9	-1.560063388	0.29083919	-1.338682209
TIMP3	-1.213651609	-0.674025032	-1.06985596
MMP2	-1.805828735	-0.759647995	-1.28250622
MMP14	-2.004486309	-0.36914293	-1.580982194
MMP13	-1.530672894	-1.669859849	-0.908303344
MMP28	-1.59009874	-0.91755455	-1.608145465
MMP11	-2.462562821	-0.792961354	-2.162431542
THBS2	-2.659334474	-0.461783663	-2.931302908
MMP12	-0.747873987	-2.959751695	-3.10251536
SDC1	-2.595904077	-1.044431134	-3.516638212
HSPG2	-3.918896936	-0.934699707	-3.392151118
MMP10	-7.182505387	-0.576527639	-5.418624825

	CT-2A Vehicle Vs. D2C7	CT-2A Vehicle Vs. CD40	CT-2A Vehicle Vs. D2C7+CD40
MMP3	1.832390522	0.529567399	2.04223505
TFPI2	1.602753888	0	1.247015981
MMP25	-0.092629137	1.401897546	0.485695855
MMP17	0.991029693	0.209358474	0.334037636
MMP24	0.748174324	0.137662912	0.45839687
TIMP1	0.505793467	-0.655316351	0.896339202
A2M	0.571895367	-0.307945601	0.413246942
TIMP4	-0.016009114	0.165030811	0.277574993
MMP15	-0.146494638	-0.045228858	0.362946022
TIMP2	-0.130210425	0.067297628	0.142889759
MMP21	-0.1337567	0.226207079	-0.072665804
MMP19	-0.017714457	0.030110663	-0.133859111
ADAM10	-0.254745255	-0.079581192	-0.322809269
MMP16	-0.195211986	-0.176756847	-0.411612606
ADAM12	0.020047573	-0.212069653	-0.629229064
RECK	-0.237246799	-0.257345558	-0.446258535
MMP23B	-0.345327867	0.00830649	-0.756364272
SDC2	-0.669188534	-0.31850691	-0.643243134
MMP8	-0.51216291	-1.201606159	0
ADAM17	-0.958611696	-0.089151026	-0.797143276

“N/A” values were changed to 0. The z scores of each row were summed, then the summed values were ranked from highest to lowest. A heatmap of the rows containing the top 20 summed values was created using GraphPad Prisim version 9.

Genes in the Senescence Pathway network	CT-2A Vehicle Vs. D2C7 Day 12 P 0.05 FC 1.5 - 2021-08-27 02:05 PM	CT-2A Vehicle Vs. CD40 Day 12 P 0.05- 2021-08-27 02:01 PM	CT-2A Vehicle Vs. D2C7+CD40 Day 12 p 0.05 FC 1.5 - 2021-08-27 02:08 PM
Saa3	2.304398429	2.192418285	3.83689231
GADD45B	3.634460603	0.162990449	3.681979502
IL6	2.632672241	1.601615073	2.283232881
CAPN11	2.738380934	1.687172539	1.150424053
CDKN1A	2.330418832	0.092662149	1.982073028
RASD1	1.443070702	0.838043739	2.02678727
SERPINE1	2.736227657	-0.133784215	1.081734217
MAPK15	0.969666329	1.118421575	1.507875454
ATF3	1.917661038	-0.626503269	2.076538077
CACNA1F	1.399390265	0.29116678	1.597816194
IL1A	0.883734947	0.386092208	1.796502767
GADD45G	1.160469349	-0.263707309	1.59251937
PPP3R2	0.98273232	0	1.423174001
SMAD9	1.059413806	0.321706532	0.986822708
PIK3R6	1.020605698	0.837835623	0.465582298
MAPK4	0.975245459	0.193832407	0.935912424
CACNG2	0.968376438	0.251936663	0.870067185
BHLHE40	1.100610002	0.200868659	0.770851076
PPP2R2C	1.045785572	0.227893879	0.555215442
CACNA1A	0.980544053	0.170335441	0.670509049
CACNB4	1.119612885	0.115751132	0.52817033
CACNA1B	0.762484141	0.315300326	0.563235202
CACNA1D	0.774097172	0.277017593	0.491604697
ACVR1C	1.042596263	0.123239469	0.368661967
PPP2R2B	0.685706657	0.367565375	0.480489505
PDK2	0.705533828	0.246725632	0.549921323
CACNA1C	0.581202569	0.283818015	0.632561719
TGFB2	0.538535198	0.133831991	0.81476993
JUN	0.891693256	-0.310196928	0.872798727
CACNA1E	0.665586408	0.281649786	0.477078219
PRKCZ	0.782226123	0.233360552	0.38645244
SOD2	0.60351362	0.158583503	0.609015627
CACNA2D4	0.19433733	0.290749718	0.847516053
CACNB1	0.710438251	0.180327545	0.425030229
Calm1 (includes others)	0.651907913	0.214764117	0.414598919
PIK3R1	0.764422022	0.181022213	0.335628496
MRAS	0.690154181	0.144671562	0.435705173
RAP2A	0.682300098	0.189243982	0.398719982
PDK4	0.61180077	0.409875134	0.221812178
FOXO3	0.615957384	0.095662402	0.529263442
YPEL3	0.62266493	0.174746822	0.358396672
CACNG4	0.244885628	0.33190935	0.571974519
PPP3CB	0.575680695	0.181911819	0.371455095
PDK1	0.504172938	0.312664389	0.302211976
CACNB2	0.275947159	0.253042855	0.561984166
BRAF	0.595918394	0.102430734	0.385288385
RASSF5	0.95180547	0.073715808	0.048476163
PPP3CC	0.457661522	0.308875423	0.283946754
PPP3R1	0.702494088	0.064893623	0.267973072
ACVR1B	0.612557661	0.148206953	0.253578248
PPP3CA	0.633232787	0.074924814	0.279847675
PPM1L	0.669557103	0.049133882	0.267529972
CAPN3	0.150195796	0.431764145	0.390169659
SQSTM1	0.384112239	0.115405966	0.469882821
CACNA2D1	0.462043516	0.174393288	0.329282905
ETS2	0.626144616	0.040827027	0.291421658
CDKN2B	0.281831202	0.256542431	0.380655814
MAP2K4	0.387734744	0.159334562	0.36632173
CACNG8	0.486146747	0.130741286	0.292880648
CACNG3	0.465669006	0.223121958	0.185601242

CACNA2D2	0.329890835	0.076431005	0.43679794
CBX7	0.285142318	0.227892401	0.274481403
PPP2R2A	0.389367407	0.044242303	0.338097162
PPP2R1A	0.345457666	0.105790095	0.286574399
PIK3R3	0.400808779	0.035557274	0.273149533
RPS6KA5	0.230178813	0.323571246	0.135156406
MDM2	0.407333862	-8.04E-04	0.268809239
RB1	0.246968978	0.166088153	0.258625798
NF1	0.28098965	0.080477703	0.292227025
CAMK4	0.628110648	0.05031284	-0.026989554
CACNA2D3	0.495783951	0.053111156	0.091224619
CHP1	0.299417503	0.126156407	0.197437894
PPM1J	0.856904024	0.123769109	-0.38269857
ARAF	0.084663406	0.203806235	0.275166967
PDHB	0.174360282	0.104605766	0.243855862
CACNG5	0.070176016	0.13922015	0.293493052
MTOR	0.228497056	0.0542766	0.128498789
RING1	0.143045373	0.109730456	0.155747945
CAPN7	0.202947226	0.075785999	0.107371703
DMTF1	0.214863412	0.089773929	0.079260978
PIK3C3	0.161488808	0.124112215	0.094348579
NFATC2	0.116512998	0.131418196	0.131975891
CACNB3	0.241587551	0.186262525	-0.055092492
MAP2K1	0.274001695	0.08194377	0.014540889
PPP2R5B	0.227679724	0.054861376	0.043586962
CACNG7	0.247141586	-0.061851921	0.136777314
TGFBR3	-0.069537938	0.252341969	0.132617714
BMPR2	0.255168516	-0.069353179	0.076196949
MAP2K7	0.146462959	0.01526473	0.091776549
CAT	0.004560107	0.148616718	0.099634564
MAPK1	0.221662089	0.030695579	-0.009812664
SMAD7	0.148743834	0.055295666	0.027316397
RRAS	0.00300756	-0.013865056	0.233198826
PDHX	0.212601044	-0.052560001	0.057298768
PPP2CA	0.075504453	-0.005335179	0.089882002
DLAT	0.120287562	-0.008211651	0.036336498
SMAD3	0.258119156	-0.126642669	9.08E-04
ANAPC2	-0.070227238	0.078317086	0.110305149
IKBKG	0.057115161	0.058224237	0.002459369
TBK1	0.018053087	0.030538596	0.009157264
PIK3R4	0.010699045	0.090345093	-0.060567214
HBP1	-0.081208439	0.045935597	0.054667177
HIPK2	-0.061926528	0.003455058	0.07595606
PPP2R3A	0.145392789	-0.107399753	-0.029465068
PPP2CB	0.056762311	-0.054069684	0.00434599
ANAPC13	-0.180124047	0.086943939	0.076594474
DLD	0.049251378	-0.03645182	-0.032913526
RASD2	0.022089258	-0.032389104	-0.016231449
PPP2R5D	-8.32E-04	-0.057881775	0.009499641
ITSN2	0.019302217	0.074093007	-0.18117481
MCU	0.152503966	-0.150964791	-0.128662994
AKT3	-0.01809565	-6.51E-04	-0.111372156
ITPR2	-0.199729931	0.119266462	-0.051264905
PPP2R5E	-0.023212327	-0.081575509	-0.03347001
ACVR2B	-0.074350502	0.09982872	-0.165941783
PTPA	-0.160427049	0.045834178	-0.027739403
VHL	-0.079592436	-0.026324454	-0.041736206
PIK3C2B	0.019045075	0.020324453	-0.189888084
ACVR2A	-0.105596813	0.010274898	-0.069500935
SIRT1	0.011541157	-0.082676161	-0.109115288
CAPN10	-0.050920663	0.003550243	-0.159235188
RBL2	-0.099092823	0.048793761	-0.159814515
HRAS	-0.03164106	-0.089585394	-0.119905972

PHF1	-0.287680639	0.042775563	-0.004926103
PDHA1	-0.032185315	-0.063839088	-0.156902061
KRAS	-0.067099296	-0.112836262	-0.117752351
ASXL2	-0.104221548	0.0363642	-0.240026967
PIK3R5	-0.422375667	0.385062402	-0.296914071
CREBBP	-0.027795524	-0.135234586	-0.18878995
ASXL1	-0.072699157	-0.093687687	-0.187126107
PCGF2	0.235913239	-0.211614989	-0.391483293
CBX8	-0.181228854	0.00486626	-0.206232432
PIK3CB	-0.144911066	-0.033630854	-0.211910156
EP300	-0.163839523	0.014728121	-0.278647666
TRAF6	-0.181693081	-0.060858993	-0.19338392
ANAPC7	-0.219465328	-0.068745721	-0.154780469
EIF4E	-0.105842951	-0.150840581	-0.195814047
MAP2K5	-0.218358004	-0.017241041	-0.218879285
FOXO4	-0.257799483	0.024722634	-0.247499208
PCGF1	-0.220379596	-0.120081099	-0.145860113
DHCR24	-0.195703521	-0.114174645	-0.189413368
PIK3CA	-0.091661082	-0.096259887	-0.3151092
CHUK	-0.102068911	-0.119971758	-0.285012499
MAPKAPK3	-0.47693973	0.08931424	-0.121048567
PIK3R2	0.047898209	-0.205261334	-0.375819124
CACNG6	-0.569295726	0.294072503	-0.263517338
CDC23	-0.147606902	-0.115528253	-0.275825494
CAPN5	-0.180621131	-0.093115676	-0.283858647
PIK3CD	-0.400234197	0.232056505	-0.390273705
MAPK3	-0.431500479	0.043781863	-0.176277534
RAP2B	-0.100382628	-0.097691328	-0.379417474
MAPK14	-0.139197693	-0.099072582	-0.356863576
PTEN	-0.079101365	-0.17070878	-0.368207623
ANAPC11	-0.371344688	0.021453786	-0.284763213
FZR1	-0.328081952	-0.078825963	-0.255428648
TLR2	-0.847521042	0.033495067	0.135115175
CDC16	-0.251783617	-0.20327469	-0.251981924
CACNA1S	-0.819111167	0.192104745	-0.081732317
GADD45A	0.223720883	-0.633767917	-0.315938555
MAP2K2	-0.341351032	-0.113776902	-0.327055908
E2F5	-0.298110378	-0.076363778	-0.426648288
CAPN2	-0.256169699	-0.239945275	-0.335274516
PPP2R5A	-0.238755344	-0.136252229	-0.458721699
ASXL3	-0.182771654	-0.321582432	-0.353281567
PDK3	-0.387251566	-0.060541403	-0.413795399
ANAPC4	-0.339898467	-0.125556112	-0.402271322
RALA	-0.291329662	-0.18280058	-0.411764281
PCGF6	-0.260041989	-0.196928172	-0.429853629
PIK3CG	-0.647008186	0.274553437	-0.516621285
NBN	-0.325511164	-0.281191372	-0.283465928
SMAD6	-0.650908443	0.075106685	-0.322911922
CDC26	-0.418578037	-0.120441379	-0.364125994
EP400	-0.3932271	-0.117180007	-0.400551888
IKBKB	-0.486657253	0.04563912	-0.513543973
RAP1A	-0.553735138	-0.031423322	-0.439828779
TGFBR1	-0.486182368	-0.109809299	-0.432396642
ATR	-0.498440839	-0.078353968	-0.462925719
MAPK6	-0.263962713	-0.368141749	-0.451463818
MAPKAPK5	-0.407942428	-0.202122672	-0.503306311
AKT2	-0.356113282	-0.199678196	-0.578220962
IRF3	-0.636160022	-0.027052461	-0.502590589
CAPNS1	-0.548789217	-0.173216462	-0.449670321
PIK3C2A	-0.502466117	-0.23585189	-0.439350113
IKBKE	-1.036014372	0.361096041	-0.505404541
CDC27	-0.452009413	-0.207266893	-0.530648696
CDKN1B	-0.455854568	-0.174694093	-0.564699342

ACVR1	-0.052823127	-0.500415385	-0.642543378
ELF2	-0.583835343	-0.095214027	-0.543322622
ANAPC5	-0.511604536	-0.179941583	-0.54350463
ANAPC10	-0.567855571	-0.252288396	-0.434531483
PARP1	-0.437104753	-0.22773542	-0.623991093
RNF2	-0.37622953	-0.297306947	-0.623756423
KAT2B	-0.69517775	-0.102562399	-0.522744038
RALB	-0.582960858	-0.255191052	-0.489656968
E2F6	-0.525538378	-0.241174245	-0.568176961
SMAD2	-0.475409272	-0.267961213	-0.601765538
E2F3	-0.377261466	-0.262946575	-0.718628523
RAP1B	-0.560115139	-0.227694535	-0.628214466
ANAPC1	-0.574798252	-0.255238139	-0.609521386
MAPK7	-0.565431326	-0.304237897	-0.600269649
SMAD1	-0.579320523	-0.306858269	-0.632035694
RAF1	-0.57265791	-0.259895568	-0.6939944
ING1	-0.572873225	-0.295602464	-0.693540499
ZFP36L1	-0.690214564	-0.184532127	-0.721465894
TGFBR2	-0.901983488	-0.1228667	-0.601334906
MAPKAPK2	-0.599091678	-0.278191373	-0.75012849
RPS6KA4	-0.52251997	-0.306217392	-0.842791851
MRE11	-0.676494197	-0.181589771	-0.8393676
PPP2R1B	-0.566608976	-0.256771668	-0.892147677
MAP2K6	-0.80428282	-0.182524424	-0.787358838
TGFB1	-0.776918402	-0.171910711	-0.839869491
CEBPB	-0.980339236	-0.202040122	-0.606707479
NFAT5	-0.652131739	-0.249876195	-0.890958419
CCND2	-0.704402088	-0.102412742	-1.001093716
ELF1	-1.021168441	0.032958467	-0.821751009
NRAS	-0.704373148	-0.298063564	-0.825451221
EED	-0.797490228	-0.229453958	-0.845473235
E2F4	-0.615773775	-0.352428677	-0.91193334
PPP1CA	-0.824747812	-0.224812371	-0.881193911
NFATC1	-0.953073103	-0.154249265	-0.862187568
SMAD4	-0.776245656	-0.374666121	-0.865694718
CCNE1	-0.92727506	-0.056199834	-1.046675115
NFKB2	-1.205269122	-0.188087575	-0.74226866
SMAD5	-0.846717854	-0.454308257	-0.842439911
CCNE2	-0.919314193	-0.375045473	-1.065204001
AKT1	-0.993383133	-0.444645575	-1.033339036
CCND3	-1.095864522	-0.291159195	-1.099233178
RRAS2	-1.03558019	-0.428103119	-1.130924254
ATM	-1.213606221	-0.069835186	-1.335160233
NFKB1	-1.367641583	-0.259909523	-1.077869284
PHF19	-1.321401154	-0.07870484	-1.356256267
RAD50	-1.162269875	-0.339276314	-1.279987544
CAPN1	-1.28145416	-0.252652369	-1.282118951
ITPR3	-1.642588713	0.07355267	-1.310977837
ELF4	-1.806282431	-0.016145651	-1.464797805
MAP2K3	-1.041692264	-0.570656724	-1.696510333
ETS1	-1.675068289	-0.342944928	-1.471714837
MAPK12	-1.347128396	-0.567704996	-1.763668756
CDC25B	-1.40553463	-0.497165032	-1.79263753
PML	-1.918291227	-0.180933577	-1.621533893
CDC25A	-1.683285735	-0.394434684	-1.661744809
STING1	-2.21798913	-0.162013599	-1.410534832
ELK3	-1.800906942	-0.453130796	-1.656243168
TP53	-1.681008404	-0.52601342	-1.710998123
CHEK2	-1.945233057	-0.301301618	-1.773494946
NFATC3	-1.845793142	-0.439612534	-1.906553372
CBX2	-1.684048295	-0.538277193	-2.195716462
CCNB2	-2.13659522	-0.454073888	-1.955505264
E2F1	-1.675956595	-0.64131848	-2.294678651

CDK4	-2.134962858	-0.62544318	-2.176814786
TGFB3	-1.945814345	-0.945444709	-2.229942954
RBL1	-2.685664958	-0.310912555	-2.15185355
NFATC4	-2.36472549	-0.767474139	-2.263926338
CCND1	-2.27317279	-0.645794468	-2.621422746
EIF4EBP1	-2.611489484	-0.580813572	-2.48099038
CDK2	-2.657205383	-0.528806637	-2.531673086
CHEK1	-2.622894219	-0.552810179	-2.679696407
CGAS	-2.830785645	-0.519173525	-2.572173423
EZH2	-2.546777073	-0.702365676	-2.723164287
CDK6	-2.909893903	-0.442741562	-2.788228297
E2F7	-2.886712179	-0.661076527	-2.622296242
E2F2	-3.539845688	-0.398432161	-2.707423417
CDC25C	-3.787258305	-0.586902872	-3.824673236
CDK1	-3.829241097	-0.764668323	-3.892110555
CCNB1	-4.022396059	-0.700716311	-4.442363326
E2F8	-4.314112131	-0.795762362	-4.13040976
CDKN2A	-4.845143498	-0.663105285	-4.532509214
CAPN6	-4.605798295	-0.833467665	-4.61253477
GATA4	-7.257455177	-0.959911669	-5.277100139

	CT-2A Vehicle Vs. D2C7	CT-2A Vehicle Vs. CD40	CT-2A Vehicle Vs. D2C7+CD40
Saa3	2.304398429	2.192418285	3.83689231
GADD45B	3.634460603	0.162990449	3.681979502
IL6	2.632672241	1.601615073	2.283232881
CAPN11	2.738380934	1.687172539	1.150424053
CDKN1A	2.330418832	0.092662149	1.982073028
RASD1	1.443070702	0.838043739	2.02678727
SERPINE1	2.736227657	-0.133784215	1.081734217
MAPK15	0.969666329	1.118421575	1.507875454
ATF3	1.917661038	-0.626503269	2.076538077
CACNA1F	1.399390265	0.29116678	1.597816194
IL1A	0.883734947	0.386092208	1.796502767
GADD45G	1.160469349	-0.263707309	1.59251937
PPP3R2	0.98273232	0	1.423174001
SMAD9	1.059413806	0.321706532	0.986822708
PIK3R6	1.020605698	0.837835623	0.465582298
MAPK4	0.975245459	0.193832407	0.935912424
CACNG2	0.968376438	0.251936663	0.870067185
BHLHE40	1.100610002	0.200868659	0.770851076
PPP2R2C	1.045785572	0.227893879	0.555215442
CACNA1A	0.980544053	0.170335441	0.670509049

“N/A” values were changed to 0. The z scores of each row were summed, then the summed values were ranked from highest to lowest. A heatmap of the rows containing the top 20 summed values was created using GraphPad Prisim version 9.