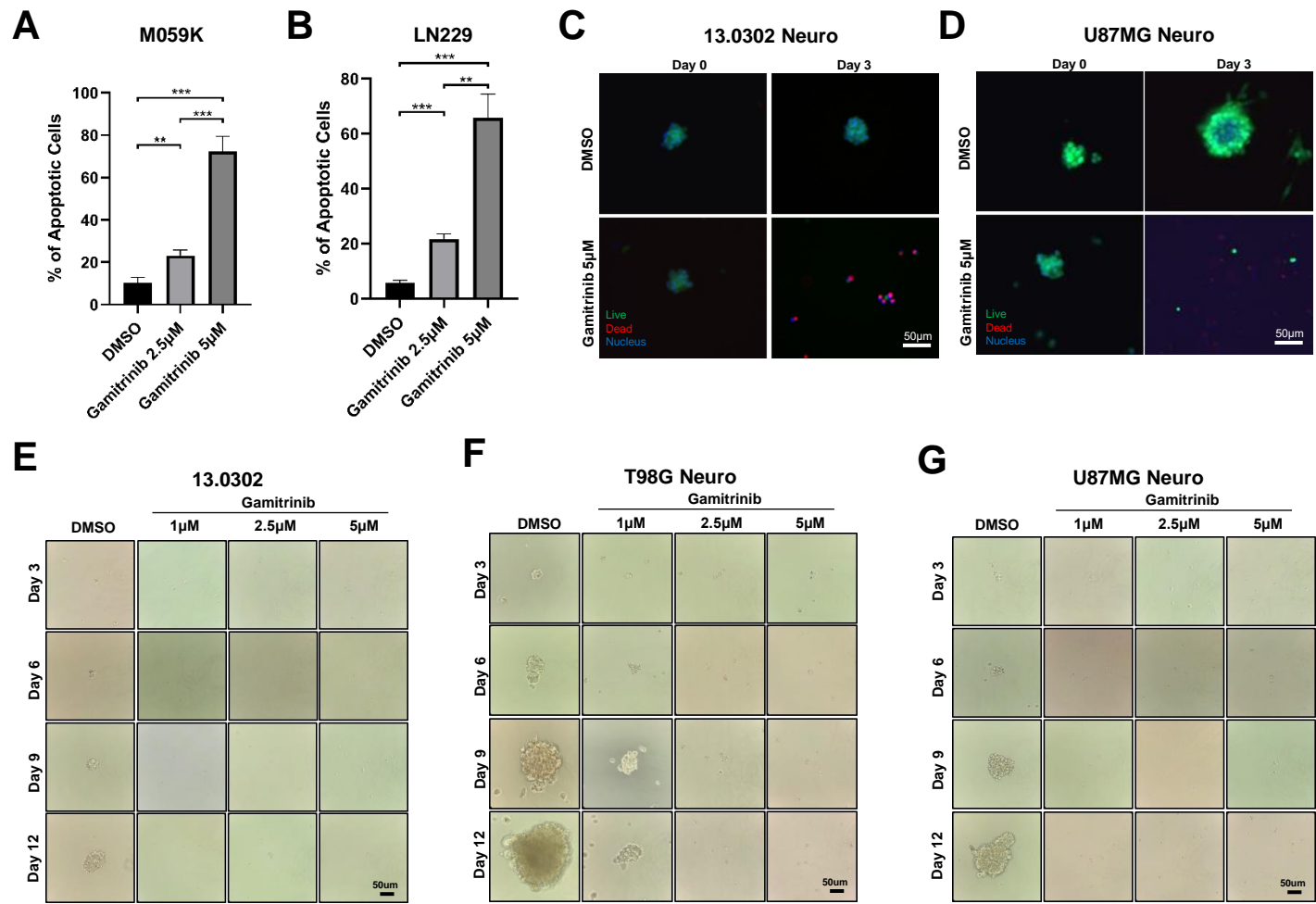
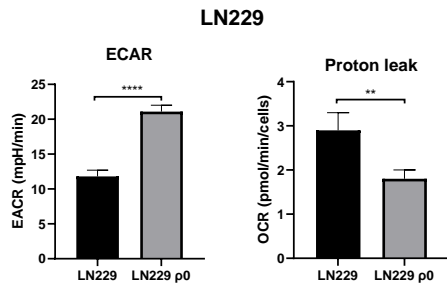


Supplemental Figure 1

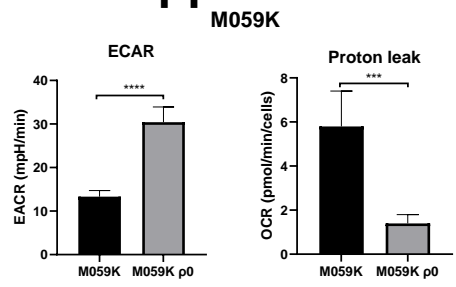


Supplemental Figure 2

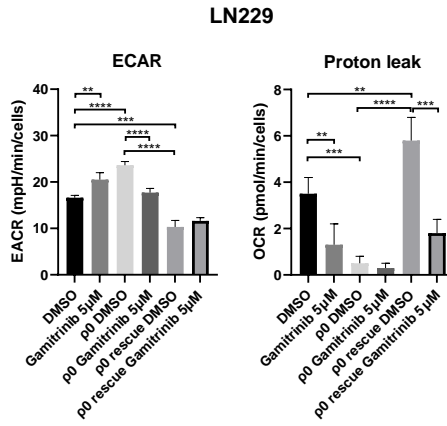
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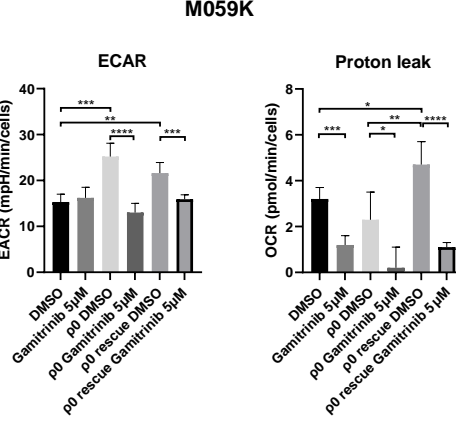
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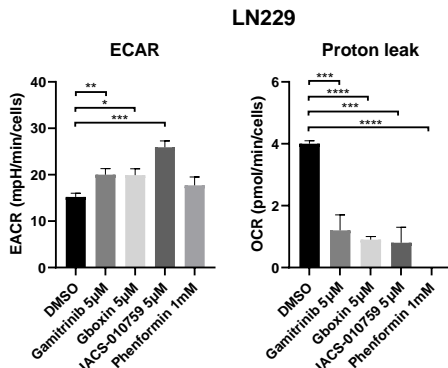
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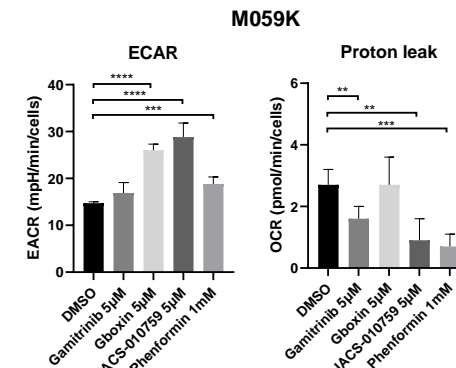
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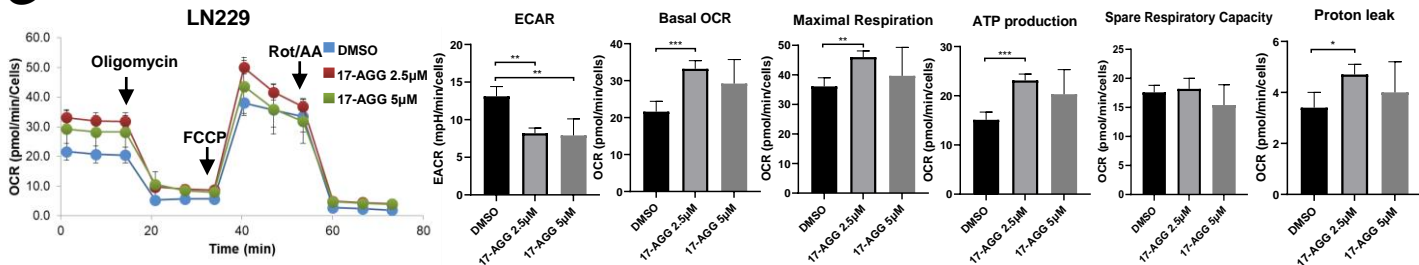
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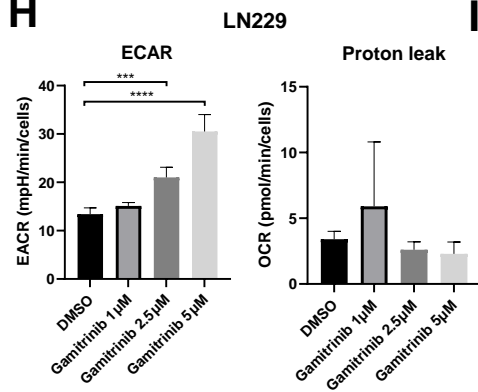
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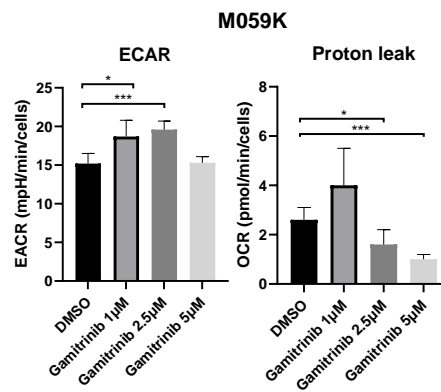
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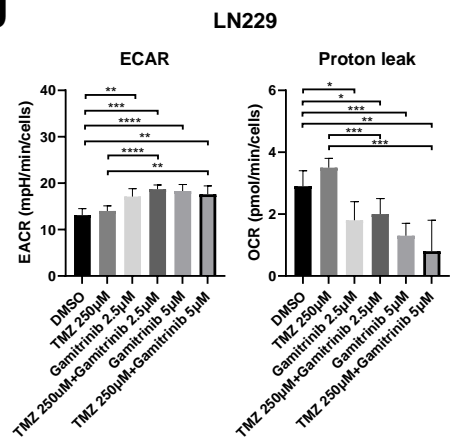
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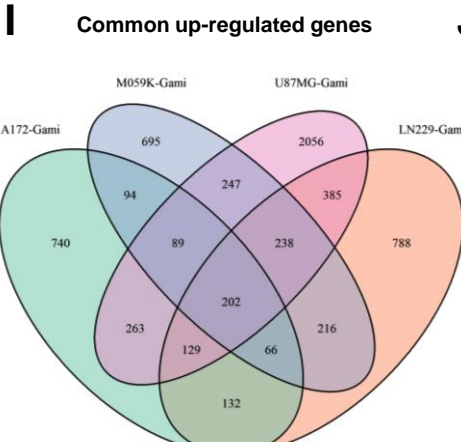
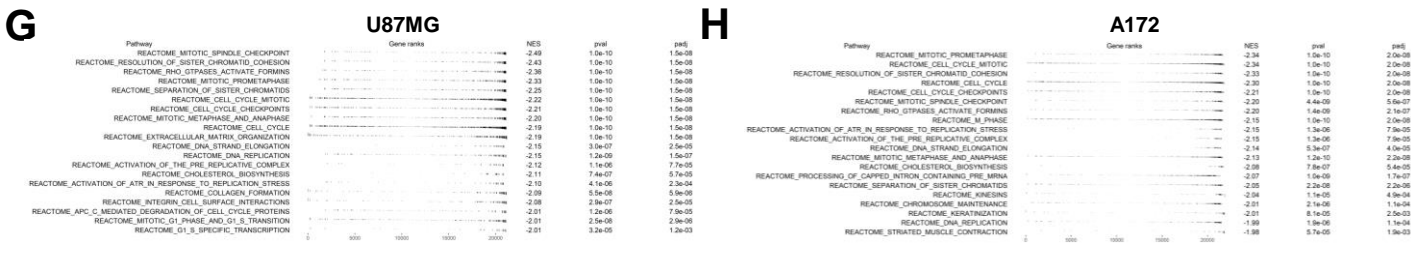
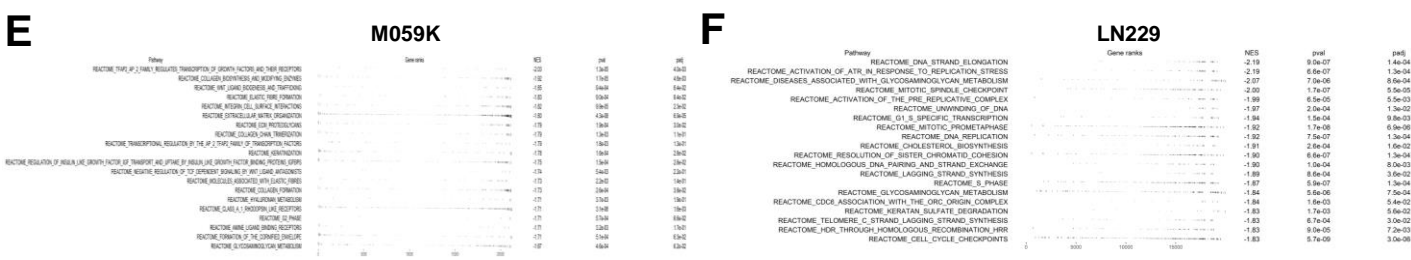
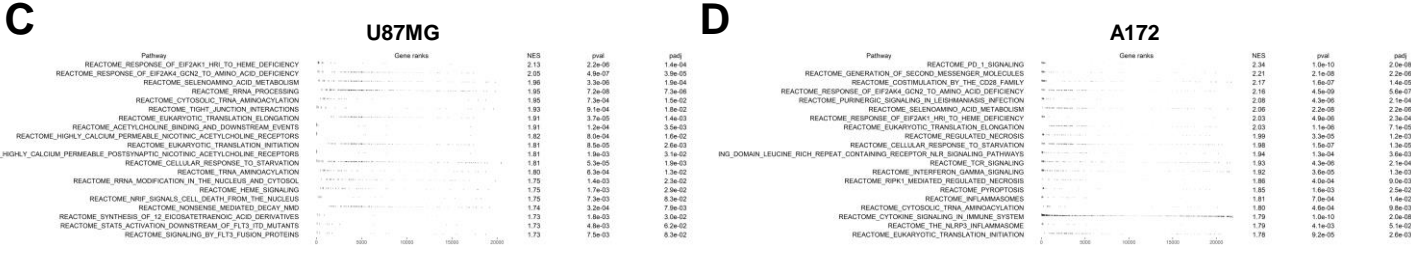
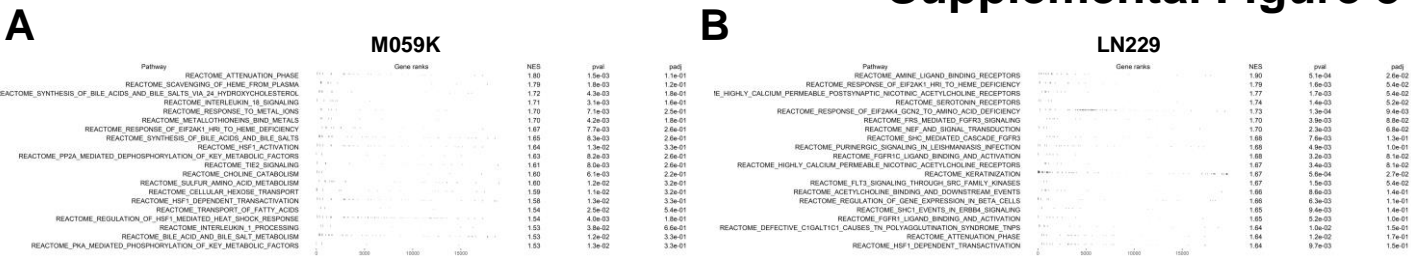
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J



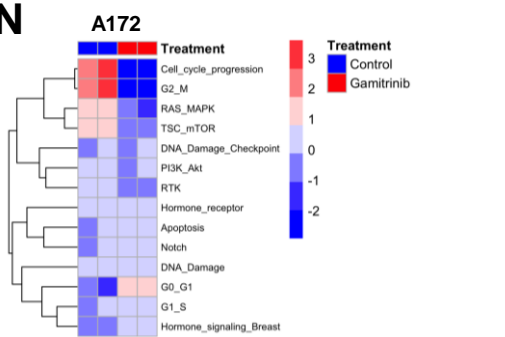
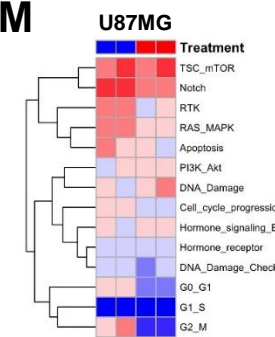
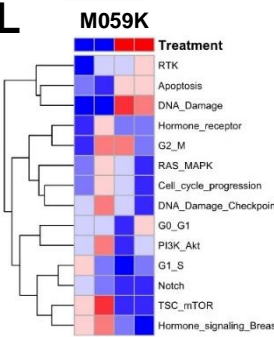
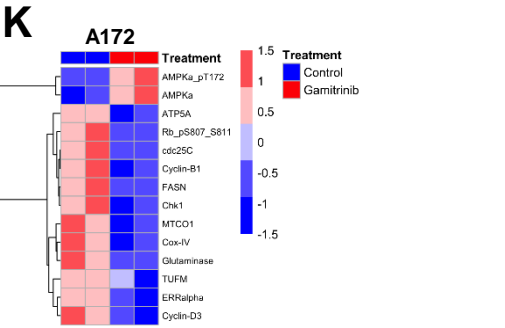
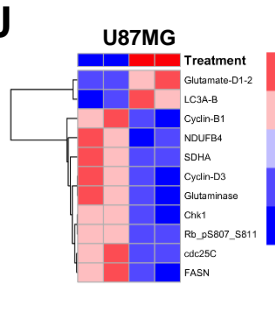
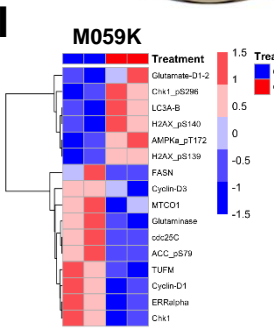
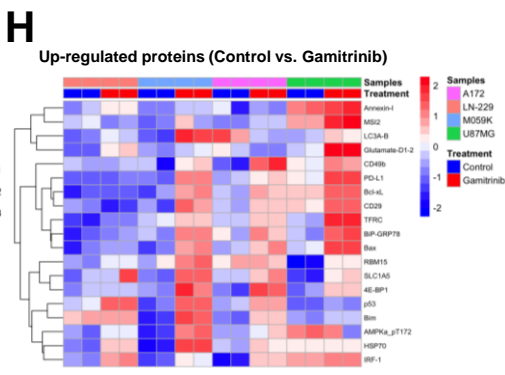
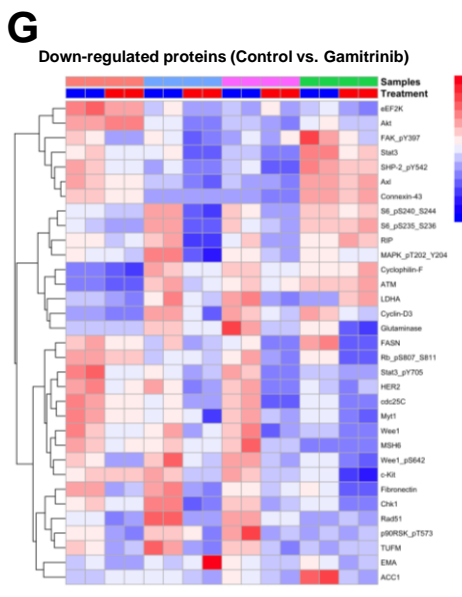
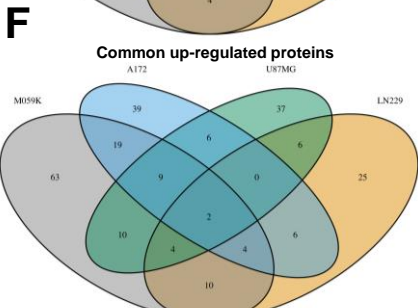
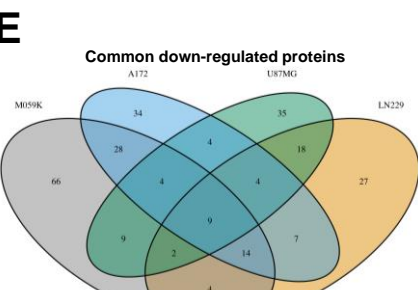
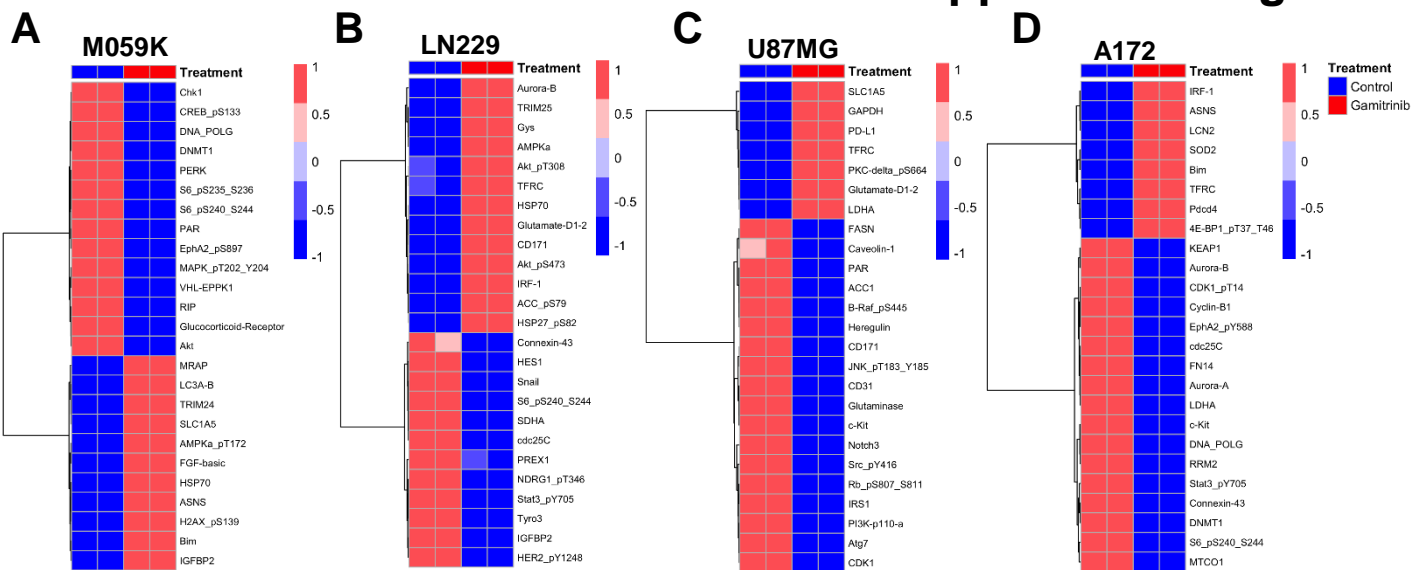
Supplemental Figure 3



J **Common up-regulated pathways**

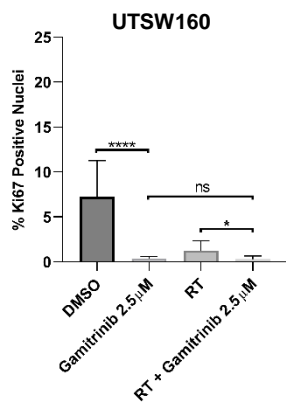
Rank	Pathways	P value	Adjusted P value	Count
1	TRANSCRIPTIONAL_REGULATION_BY_TP53	0.00070713	0.02339436	12
2	METABOLISM_OF_AMINO_ACIDS_AND_DERIVATIVES	0.00297173	0.06939858	11
3	CELLULAR_RESPONSE_TO_STARVATION	9.4587E-06	0.00059027	10
4	RESPONSE_OF_EIF2AK1_HRL_TO_HEME_DEFICIENCY	9.1494E-15	3.6323E-12	9
5	UNFOLDED_PROTEIN_RESPONSE_UPR	7.7505E-07	0.00102659	9
6	SLC_MEDIATED_TRANSMEMBRANE_TRANSPORT	0.00187061	0.05304506	9
7	RESPONSE_OF_EIF2AK4_GCN2_TO_AMINO_ACID_DEFICIENCY	0.00013664	0.00602736	7
8	TRANSPORT_OF_INORGANIC_CATIONS_ANIONS_AND_AMINO_ACIDS_OLIGOPEPTIDES	0.00017384	0.00690136	7
9	METABOLISM_OF_VITAMINS_AND_COFACTORS	0.00511649	0.0940042	7
10	PROGRAMMED_CELL_DEATH	0.00851147	0.13516214	7
11	TRANSLATION	0.04636715	0.36093644	7
12	CYTOSOLIC_TRNA_AMINOACYLATION	1.9127E-07	3.7967E-05	6
13	AMINO_ACID_TRANSPORT_ACROSS_THE_PLASMA_MEMBRANE	1.4503E-06	0.0014394	6
14	TRNA_AMINOACYLATION	6.3301E-06	0.00050261	6
15	METABOLISM_OF_WATER_SOLUBLE_VITAMINS_AND_COFACTORS	0.00246908	0.06408716	6
16	AUTOPHAGY	0.00673404	0.11623541	6
17	ATF4_ACTIVATES_GENES_IN_RESPONSE_TO_ENDOPLASMIC_RETICULUM_STRESS	1.0408E-05	0.00059027	5
18	PERK_REGULATES_GENE_EXPRESSION	2.4832E-05	0.0123231	5
19	DEATH_RECEPTOR_SIGNALLING	0.02046321	0.23893803	5
20	APPTOSIS	0.0493776	0.37698797	5

Supplemental Figure 4

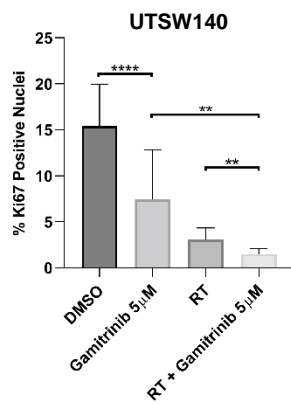


Supplemental Figure 5

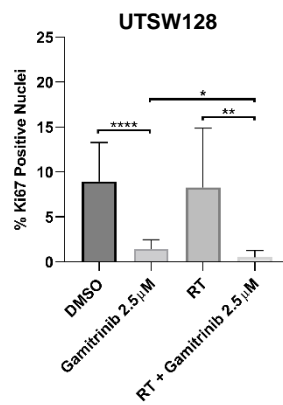
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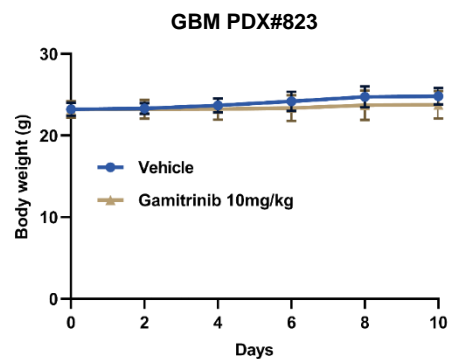
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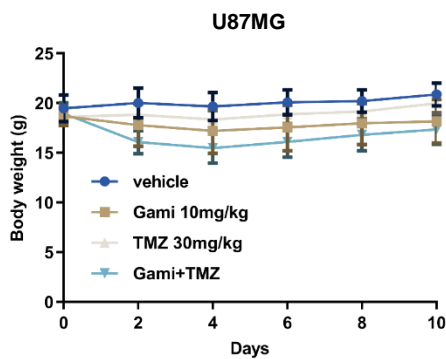
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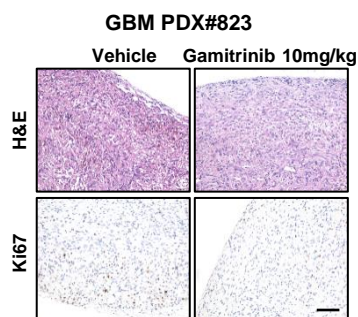
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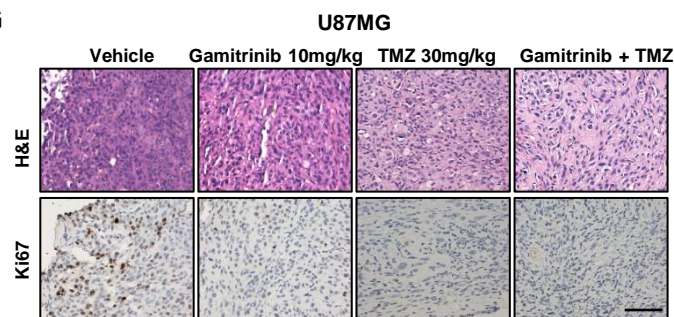
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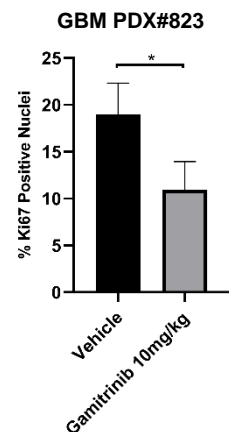
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