

MCODE 1mRNA splicing -Major Pathway-12.4MCODE 1mRNA splicing-12.2MCODE 2Regulation of cellular amide metabolic process-6.7Regulation of cellular amide metabolic process-6.7Regulation of translation-6.6Vesicle budding from membrane-6.6Activation of gene expression by SREBF (SREBP)-10.9Regulation of cholesterol biosynthesis by SREBP (SREBP)-10.3MCODE 3Carbohydrate metabolic process-8.6MCODE 4Carbohydrate metabolic process-6.2MCODE 5Mitochondrial protein import-8.8MCODE 6Diabetic cardiomyopathy-8.8MCODE 7Diabetic cardiomyopathy-8.8MCODE 8DNA damage recognition in GG-NER-6.9MCODE 6Formation of incision complex in GG-NER-6.9MCODE 7Negative regulation of intrinsic apoptotic signaling-6.1MCODE 8Cell cycle-6.9MCODE 9Loss of NIp from mitotic centrosomes-6.4MCODE 9Intra-Golgi raffic-13.1MCODE 9Intra-Golgi ind retrograde Golgi-to-ER traffic-13.1MCODE 9Intra-Golgi vesicle mediated transport-10.7MCODE 9Intra-Golgi vesicle mediated transport-10.7MCODE 10PID ERA genomic pathway-7.0	MCODE subcluster	Downregulated GO Pathways	Log <sub>10</sub> P
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MCODE 7       Negative regulation of apoptotic signaling       -4.6         Negative regulation of apoptotic signaling       -6.9         Cell cycle       -6.9         Loss of Nlp from mitotic centrosomes       -6.4         Loss of proteins required for interphase microtubule organization       -6.4         MCODE 8       Intra-Golgi traffic       -13.5         MCODE 9       Intra-Golgi and retrograde Golgi-to-ER traffic       -13.1         MCODE 9       Intra-Golgi vesicle mediated transport       -10.7         Chromatin organization       -7.5         MCODE 10       Exercision       -7.5	MCODE 7	Negative regulation of intrinsic apoptotic signaling	-6.7
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MCODE 8       Loss of Nlp from mitotic centrosomes       -6.4         MCODE 8       Loss of proteins required for interphase microtubule organization       -6.4         MCODE 9       Intra-Golgi traffic       -13.5         Intra-Golgi and retrograde Golgi-to-ER traffic       -13.1         MCODE 9       Intra-Golgi vesicle mediated transport       -10.7         Chromatin organization       -7.5         MCODE 10       Exercise to the mediated transport       -7.5		Negative regulation of apoptotic signaling	-4.6
MCODE 8       Loss of proteins required for interphase microtubule organization       -6.4         MCODE 9       Intra-Golgi traffic       -13.5         Intra-Golgi and retrograde Golgi-to-ER traffic       -13.1         Intra-Golgi vesicle mediated transport       -10.7         Chromatin organization       -7.5         MCODE 10       Chromatin modifying enzymes       -7.5	MCODE 8	Cell cycle	-6.9
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MCODE 9     Intra-Golgi vesicle mediated transport     -10.7       Chromatin organization     -7.5       MCODE 10     Chromatin modifying enzymes     -7.5	MCODE 9	Intra-Golgi traffic	- 13.5
Intra-Golgi vesicle mediated transport         -10.7           Chromatin organization         -7.5           Chromatin modifying enzymes         -7.5		Intra-Golgi and retrograde Golgi-to-ER traffic	- 13.1
MCODE 10 Chromatin modifying enzymes -7.5		Intra-Golgi vesicle mediated transport	- 10.7
MCODE 10	MCODE 10	Chromatin organization	-7.5
		Chromatin modifying enzymes	-7.5
		PID ERA genomic pathway	-7.0