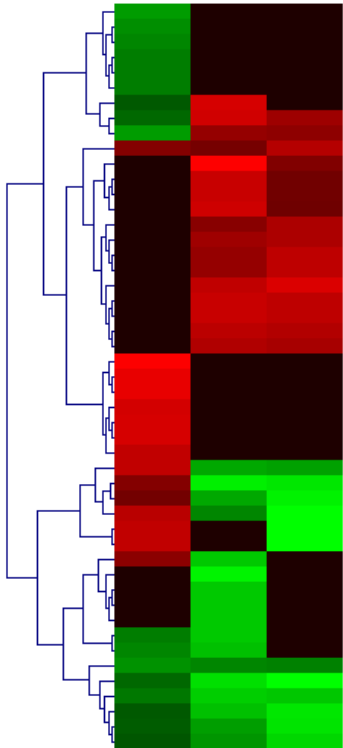


S3A



D4 D6 D8

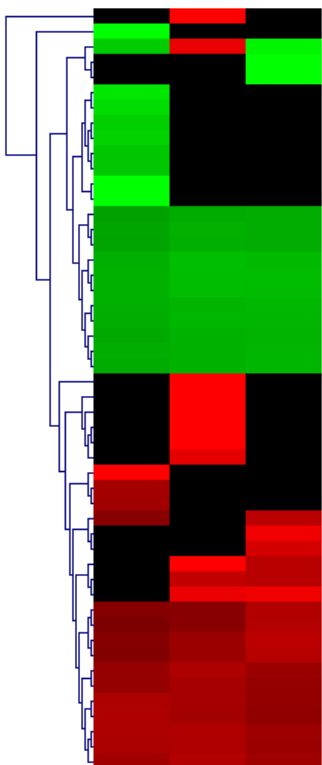


"G-protein signaling, coupled to cGMP nucleotide second messenger"
 mRNA splice site selection
 cell volume homeostasis
 positive regulation of cardiac muscle hypertrophy
 positive regulation of muscle hypertrophy
 positive regulation of fatty acid biosynthetic process
 regulation of protein homodimerisation activity
 regulation of cholesterol biosynthetic process
 synapse maturation
 long-term memory
 regulation of inhibitory postsynaptic membrane potential
 endoplasmic reticulum unfolded protein response
 cellular response to unfolded protein
 membrane hyperpolarisation
 quinone cofactor biosynthetic process
 "synaptic transmission, cholinergic"
 "positive regulation of synaptic transmission, GABAergic"
 AMP metabolic process
 nitric oxide mediated signal transduction
 saliva secretion
 positive regulation of digestive system process
 quinone cofactor metabolic process
 regulation of cholesterol metabolic process
 positive regulation of membrane potential
 inositol phosphate dephosphorylation
 vesicle transport along microtubule
 phosphatidylinositol-3-phosphate biosynthetic process
 phosphorylated carbohydrate dephosphorylation
 inositol phosphate catabolic process
 cellular senescence
 detection of mechanical stimulus involved in sensory perception of sound
 natural killer cell differentiation
central nervous system projection neuron axonogenesis
 response to growth hormone stimulus
 growth hormone receptor signaling pathway
 cellular response to growth hormone stimulus
 sphingosine metabolic process
 G-protein coupled glutamate receptor signaling pathway
 glycosphingolipid biosynthetic process
 interferon-alpha production
 regulation of interferon-alpha production
 epithelial structure maintenance
 "DNA damage response, signal transduction resulting in transcription"
 water homeostasis
regulation of dendritic spine morphogenesis
 "DNA damage response, signal transduction by p53 class mediator resulting in transcription of p21 class mediator"
 pyrimidine base metabolic process
dendritic spine morphogenesis
dendritic spine organisation

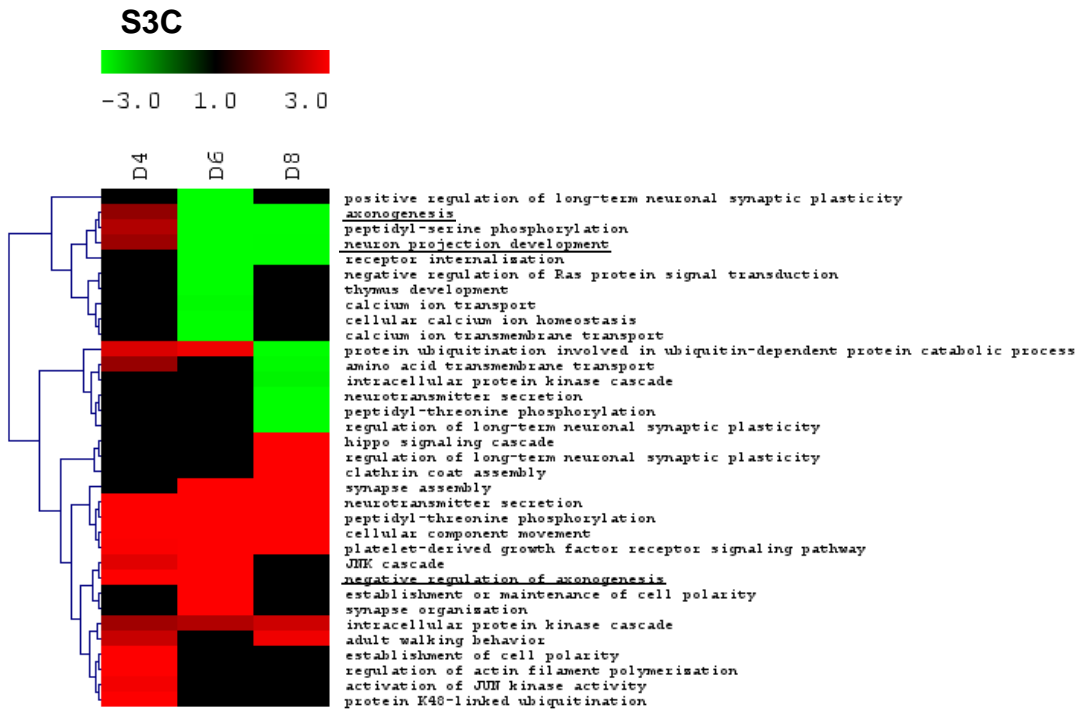
S3B



D4 D6 D8



stem cell development
 mRNA splice site selection
 embryonic morphogenesis
 embryonic organ morphogenesis
 embryonic skeletal system morphogenesis
 microtubule cytoskeleton organisation
 RNA splicing
 RNA processing
 microtubule-based process
 mRNA metabolic process
 chromatin modification
 ribonucleoprotein complex assembly
 ribonucleoprotein complex subunit organisation
 cellular macromolecule metabolic process
 regulation of cellular metabolic process
 regulation of primary metabolic process
 RNA metabolic process
 "transcription, DNA-dependent"
 RNA biosynthetic process
 regulation of RNA metabolic process
 nucleic acid metabolic process
 regulation of cellular biosynthetic process
 "regulation of transcription, DNA-dependent"
 regulation of cellular macromolecule biosynthetic process
 embryonic skeletal system development
 skeletal system development
 regionalisation
 pattern specification process
 organ morphogenesis
 cellular macromolecule catabolic process
 anterior/posterior pattern specification
 regulation of kinase activity
 regulation of transferase activity
 positive regulation of transcription from RNA polymerase II promoter
 positive regulation of kinase activity
regulation of neurogenesis
system development
positive regulation of cell differentiation
 positive regulation of transferase activity
 regulation of transcription from RNA polymerase II promoter
 positive regulation of gene expression
 "positive regulation of transcription, DNA-dependent"
 positive regulation of RNA metabolic process
 negative regulation of macromolecule biosynthetic process
 negative regulation of cellular biosynthetic process
 "negative regulation of nucleoside, nucleoside, nucleotide and nucleic acid metabolic process"
 negative regulation of nitrogen compound metabolic process
 "negative regulation of transcription, DNA-dependent"
 negative regulation of RNA metabolic process
 negative regulation of cellular macromolecule biosynthetic process



S3D

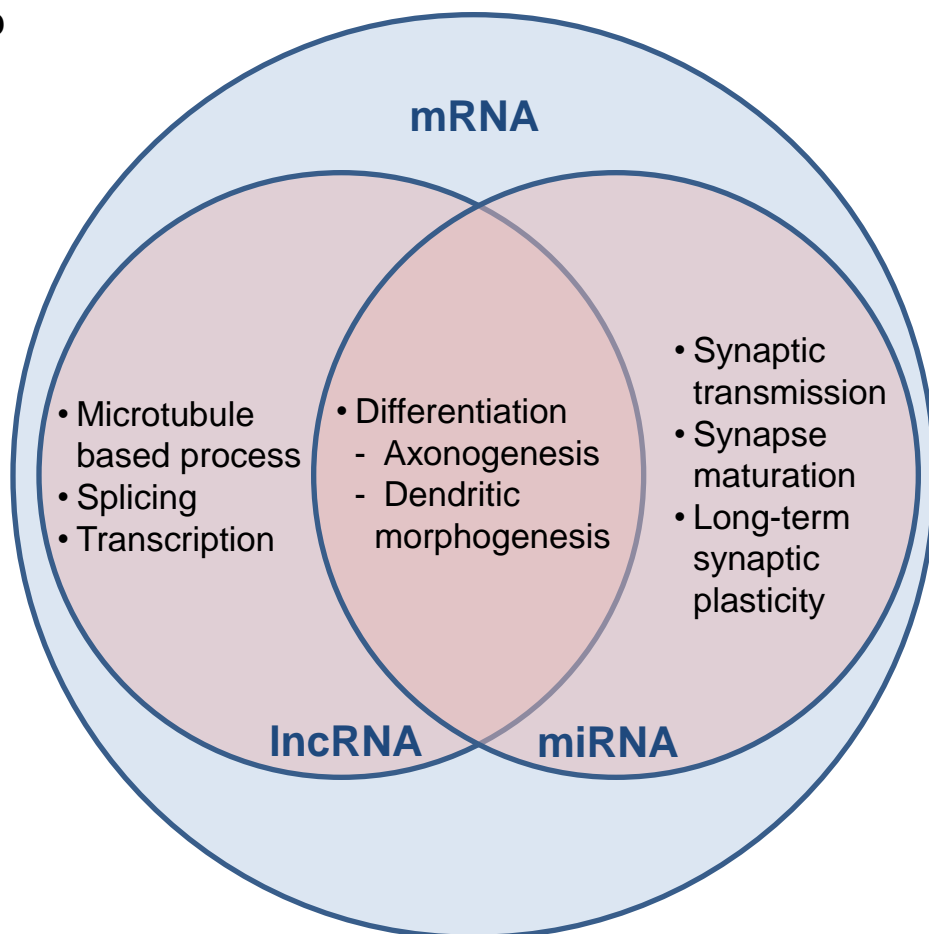


Figure S3. Biological processes associated with differentially expressed (A) mRNAs, (B) lncRNAs associated with genes in sense/antisense/bidirectional orientation, (C) miRNAs. Green rectangle indicates fold enrichment for downregulated associated/predicted genes; red indicates fold enrichment of associated/predicted genes. (D) Biological processes which are common to the differentially expressed mRNAs, lncRNAs, and miRNAs.