

0Gy Enriched Pathways

2Gy_vs_0Gy Differential Expression for all Enriched Pathways

System

Signaling by the B Cell Receptor (BCR)
 CLEC7A (Dectin-1) signaling
 Downstream signaling events of B Cell Receptor (BCR)
 Fc epsilon receptor (FCERI) signaling
 TCR signaling
 Dectin-1 mediated noncanonical NF-kB signaling
 Growth hormone receptor signaling
 Interleukin-12 family signaling
 Interferon gamma signaling
 Interleukin-6 signaling
 Interleukin-27 signaling
 Interleukin-35 Signalling
 Antigen processing-Cross presentation
 Interferon Signaling
 Rap1 signalling
 ISG15 antiviral mechanism
 ERK/MAPK targets
 Interleukin-37 signaling
 Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell
 Initial triggering of complement
 Activation of C3 and C5
 Alternative complement activation
 FLT3 Signaling

Immune System

Formation

Collagen biosynthesis and modifying enzymes
 Collagen chain trimerization
 Collagen formation
 Non-integrin membrane-ECM interactions
 Integrin cell surface interactions

ECM Formation

Genetics

Chromatin modifying enzymes
 PKMTs methylate histone lysines

Epigenetics

Repair

DNA Damage Bypass
 Translesion synthesis by Y family DNA polymerases bypasses lesions on DNA
 HDR through Homologous Recombination (HRR)
 Translesion Synthesis by POLH
 Gap-filling DNA repair synthesis and ligation in GG-NER
 Recognition of DNA damage by PCNA-containing replication complex
 HDR through Single Strand Annealing (SSA)
 Homologous DNA Pairing and Strand Exchange

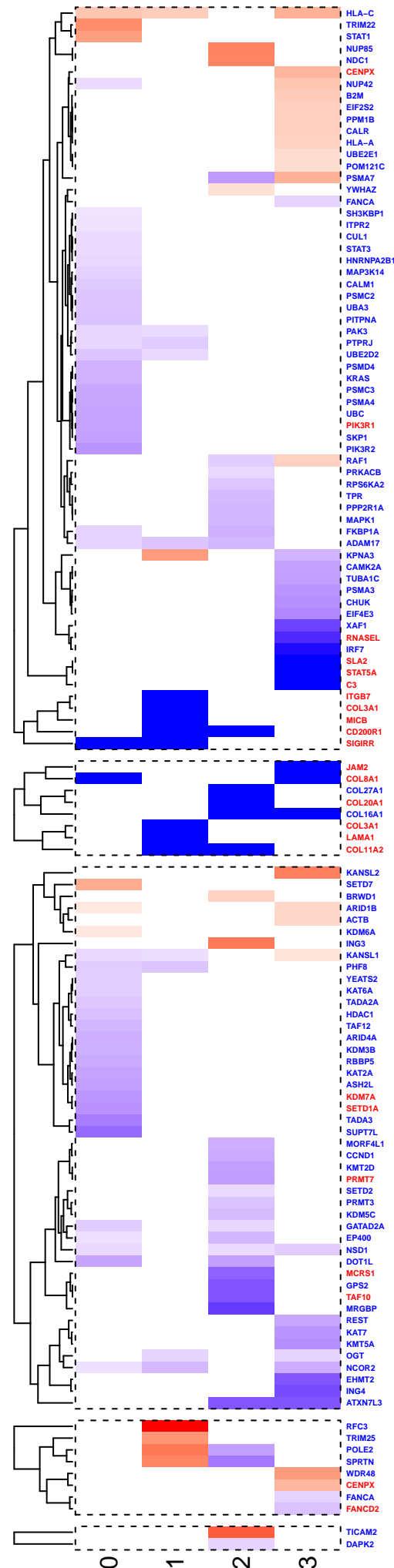
DNA Repair

Translesion synthesis by POLK
 Fanconi Anemia Pathway

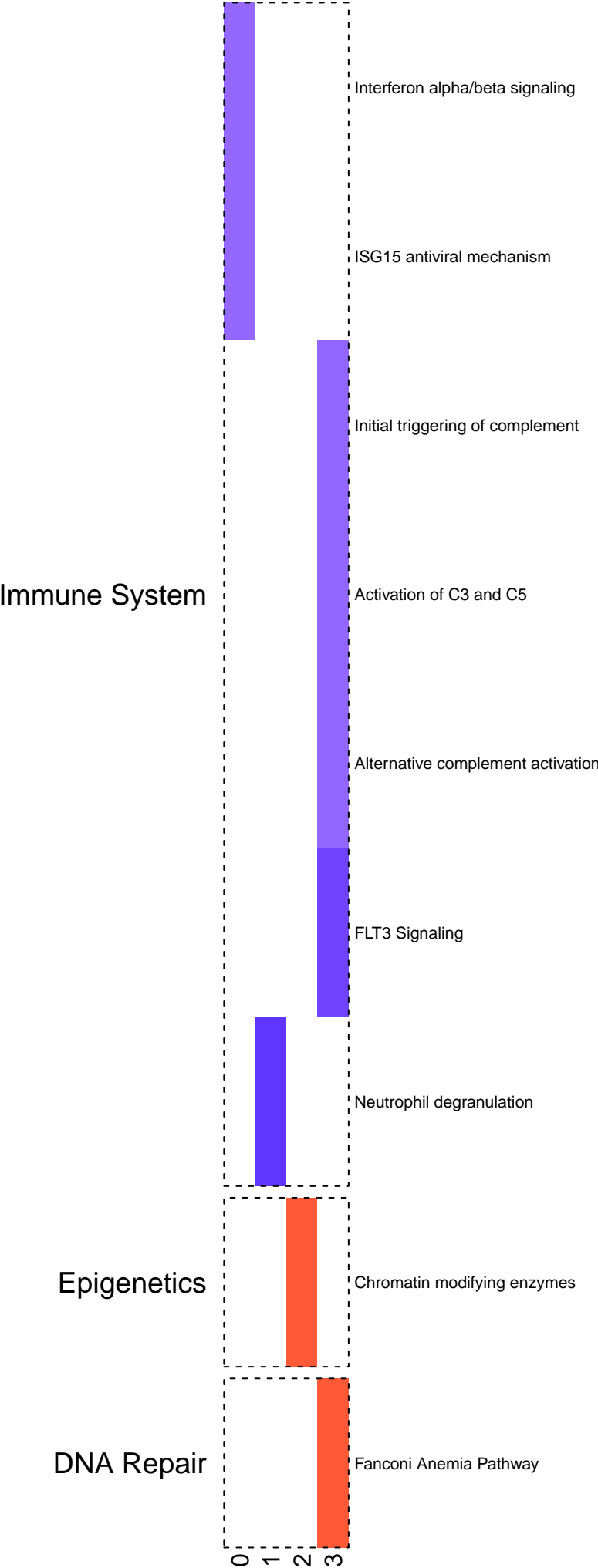
Apoptosis

Caspase activation via extrinsic apoptotic signalling pathway

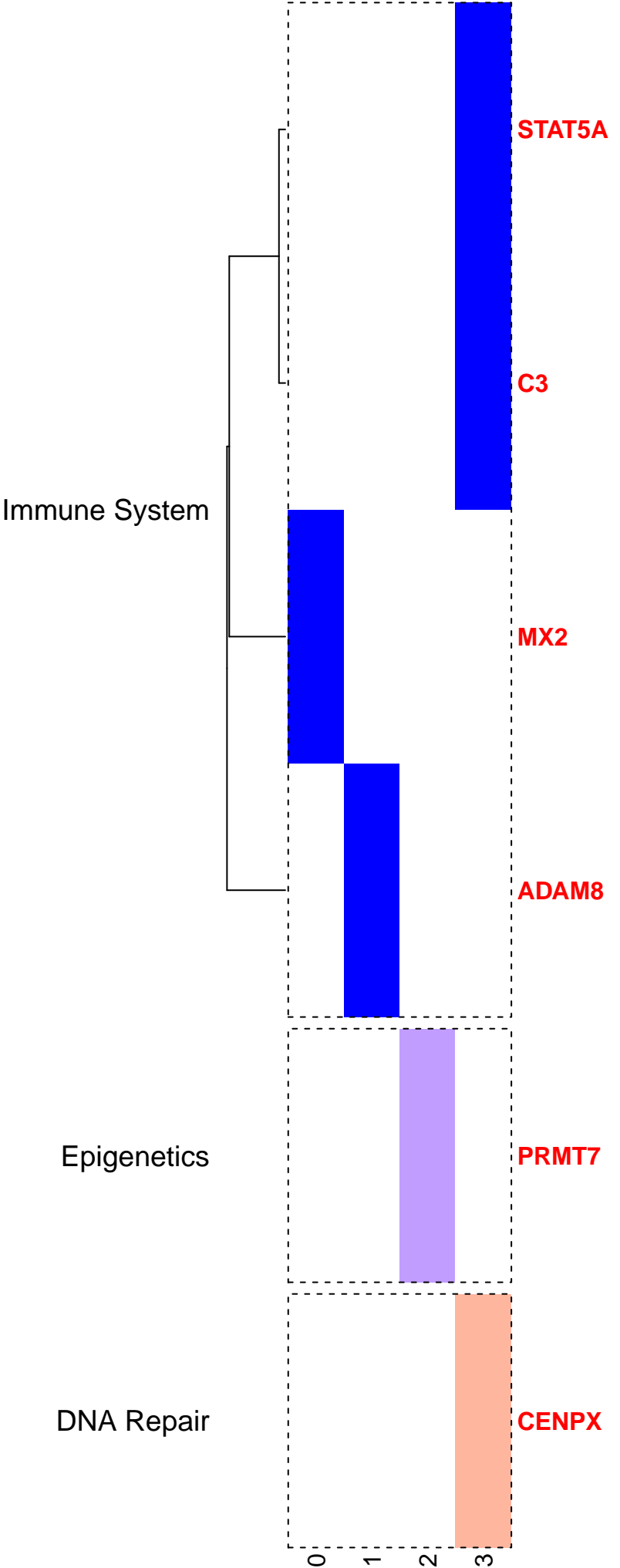
Apoptosis



unique 2Gy_vs_0Gy Enriched Pathways



2Gy_vs_0Gy Differential Expression for unique Enri



0Gy vs_0Gy Enriched Pathways

2Gy_vs_0Gy Differential Expression for common Enri

System

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Repair

ptosis

Interleukin-4 and Interleukin-13 signaling

Neutrophil degranulation

Interferon Signaling

Antiviral mechanism by IFN-stimulated genes

MHC class II antigen presentation

Interferon alpha/beta signaling

Collagen biosynthesis and modifying enzymes

Collagen chain trimerization

Collagen formation

DNA Damage Bypass

Translesion synthesis by Y family DNA polymerases bypasses lesions o

HDR through Homologous Recombination (HRR)

Resolution of AP sites via the multiple-nucleotide patch replacement pa

Resolution of Abasic Sites (AP sites)

Recognition of DNA damage by PCNA-containing replication complex

PCNA-Dependent Long Patch Base Excision Repair

Base Excision Repair

Gap-filling DNA repair synthesis and ligation in GG-NER

Translesion Synthesis by POLH

HDR through Single Strand Annealing (SSA)

Homologous DNA Pairing and Strand Exchange

Translesion synthesis by POLK

Apoptotic cleavage of cell adhesion proteins

Immune System

ECM Formation

DNA Repair

Apoptosis

FANCB

KIF15

EGR1

CCL2

PTGES2

COL16A1

RFC3

OCLN

0 1 2 3

