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### Life spanning murine gene expression profiles in relation to chronological and pathological aging in multiple organs.

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**Supplemental information 12.** Predefined list of aging related gene-sets based on literature.

Source	Gene set	# genes
Gene Ontology	aging_GO:0007568	24
Gene Ontology	cell aging_GO:0007569	10
Gene Ontology	multicellular organismal aging_GO:0010259	7
Gene Ontology	response to reactive oxygen species_GO:0000302	16
Gene Ontology	response to hydrogen peroxide_GO:0042542	10
Gene Ontology	response to oxygen radical_GO:0000305	5
Gene Ontology	DNA repair_GO:0006281	177
Gene Ontology	base-excision repair_GO:0006284	16
Gene Ontology	double-strand break repair_GO:0006302	18
Gene Ontology	mismatch repair_GO:0006298	9
Gene Ontology	non-recombinational repair_GO:0000726	6
Gene Ontology	nucleotide-excision repair_GO:0006289	22
Gene Ontology	recombinational repair_GO:0000725	6
Gene Ontology	telomere maintenance_GO:0000723	17
Gene Ontology	response to oxidative stress_GO:0006979	45
Joost	Energy_restriction_and_the_GH.IGF.1_axis	13
Joost	DNA_metabolism	30
Joost	Oxidant_levels_and_redox_potential	18
Joost	Stress_response	5
BIOCARTA	ARENRF2_PATHWAY	14
BIOCARTA	INFLAM_PATHWAY	26
BIOCARTA	DEATH_PATHWAY	30
BIOCARTA	LONGEVITY_PATHWAY	15
BIOCARTA	STRESS_PATHWAY	25
BIOCARTA	WNT_PATHWAY	25
BIOCARTA	P53_PATHWAY	16
BIOCARTA	NFKB_PATHWAY	22
BIOCARTA	IGF1MTOR_PATHWAY	19
BIOCARTA	IGF1_PATHWAY	22
BIOCARTA	MTOR_PATHWAY	23
KEGG	OXIDATIVE_PHOSPHORYLATION	110
KEGG	MTOR_SIGNALING_PATHWAY	52
KEGG	BASE_EXCISION_REPAIR	30
KEGG	NUCLEOTIDE_EXCISION_REPAIR	43
KEGG	MISMATCH_REPAIR	22
KEGG	WNT_SIGNALING_PATHWAY	148
REACTOME	BASE_EXCISION_REPAIR	16
REACTOME	CELL_DEATH_SIGNALLING_VIA_NRAGE_NRIF_AND_NADE	54
REACTOME	DEATH_RECEPTOR_SIGNALLING	11
REACTOME	DNA_REPAIR	82
REACTOME	DOUBLE_STRAND_BREAK_REPAIR	19
REACTOME	EXTENSION_OF_TELOMERES	23
REACTOME	SIGNALING_BY_WNT	16
REACTOME	SYNTHESIS_OF_DNA	46
REACTOME	TELOMERE_MAINTENANCE_hs	37
REACTOME	APOPTOSIS	82
REACTOME	ENERGY_DEPENDENT_REGULATION_OF_MTOR_BY_LKB1_AMPK	12
REACTOME	MTOR_SIGNALLING	22
REACTOME	MTORC1_MEDIATED_SIGNALLING	10