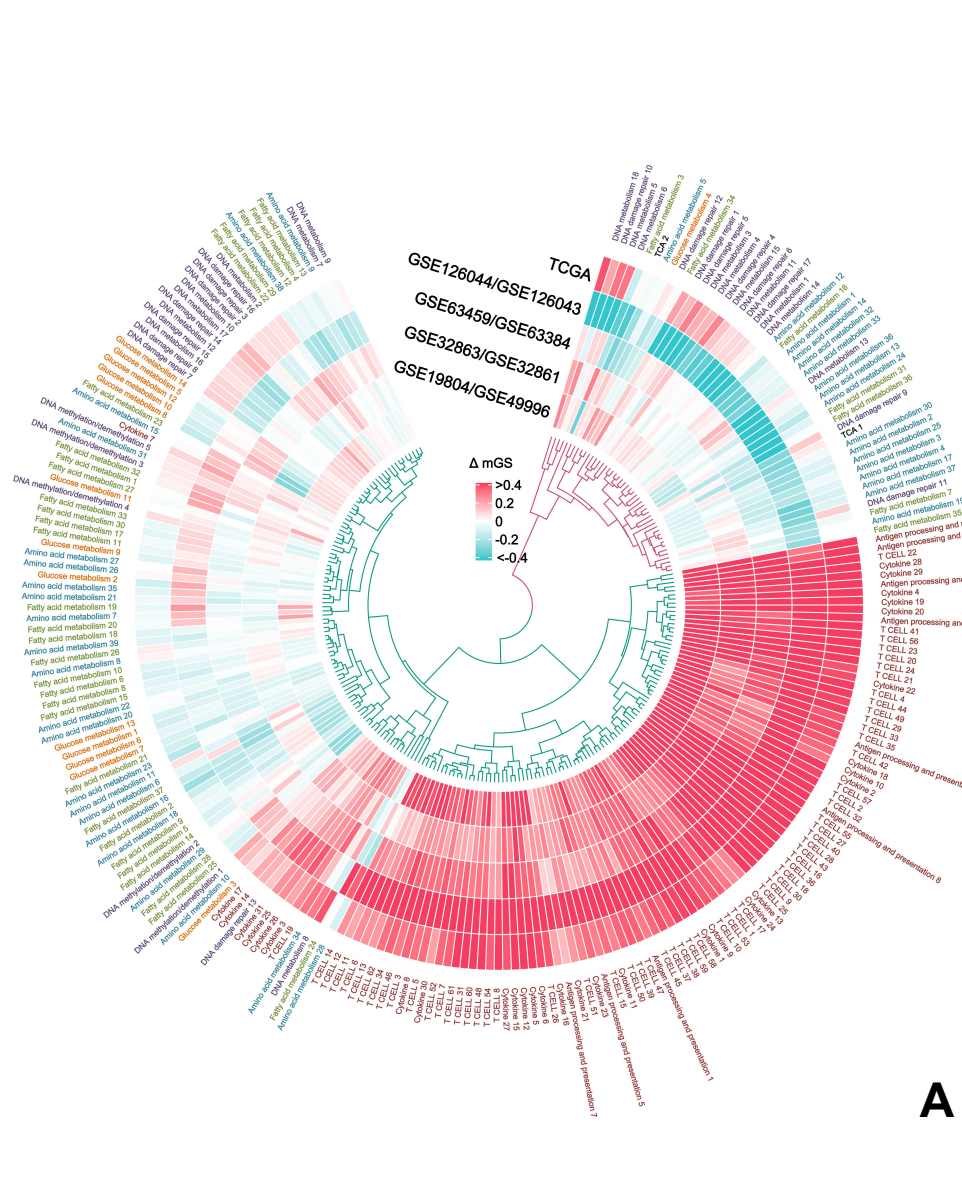


A

DNA damage repair

1: GOBP_DNA_DAMAGE_RESPONSE_DETECTION_OF_DNA_DAMAGE
2: GOBP_DNA_DAMAGE_RESPONSE_SIGNAL_TRANSDUCTION_BY_P53_CLASS_MEDIATOR
3: GOBP_DNA_DOUBLE_STRAND_BREAK_PROCESSING
4: GOBP_DNA_SYNTHESIS_INVOLVED_IN_DNA_REPAIR
5: GOBP_G2_DNA_DAMAGE_CHECKPOINT
6: GOBP_MITOTIC_G2_DNA_DAMAGE_CHECKPOINT
7: GOBP_NEGATIVE_REGULATION_OF_DNA_REPAIR
8: GOBP_NEGATIVE_REGULATION_OF_RESPONSE_TO_DNA_DAMAGE_STIMULUS
9: GOBP_NUCLEOTIDE_EXCISION_REPAIR_DNA_DAMAGE_RECOGNITION
10: GOBP_NUCLEOTIDE_EXCISION_REPAIR_DNA_GAP_FILLING
11: GOBP_NUCLEOTIDE_EXCISION_REPAIR_DNA_INCISION
12: GOBP_POSITIVE_REGULATION_OF_DNA_REPAIR
13: GOBP_REGULATION_OF_DNA_DAMAGE_RESPONSE_SIGNAL_TRANSDUCTION_BY_P53_CLASS_MEDIATOR
14: GOBP_REGULATION_OF_DNA_REPAIR
15: GOBP_REGULATION_OF_RESPONSE_TO_DNA_DAMAGE_STIMULUS
16: GOBP_SIGNAL_TRANSDUCTION_IN_RESPONSE_TO_DNA_DAMAGE
17: HALLMARK_DNA_REPAIR

DNA metabolism

1: GOBP_DNA_BIOSYNTHETIC_PROCESS
2: GOBP_DNA_CATABOLIC_PROCESS
3: GOBP_DNA_DEPENDENT_DNA_REPLICATION
4: GOBP_DNA_REPLICATION
5: GOBP_DNA_REPLICATION_INITIATION
6: GOBP_MITOTIC_DNA_REPLICATION
7: GOBP_NEGATIVE_REGULATION_OF_DNA_BIOSYNTHETIC_PROCESS
8: GOBP_NEGATIVE_REGULATION_OF_DNA_DEPENDENT_DNA_REPLICATION
9: GOBP_NEGATIVE_REGULATION_OF_DNA_METABOLIC_PROCESS
10: GOBP_NEGATIVE_REGULATION_OF_DNA_REPLICATION
11: GOBP_POSITIVE_REGULATION_OF_DNA_BIOSYNTHETIC_PROCESS
12: GOBP_POSITIVE_REGULATION_OF_DNA_METABOLIC_PROCESS
13: GOBP_POSITIVE_REGULATION_OF_DNA_REPLICATION
14: GOBP_REGULATION_OF_DNA_BIOSYNTHETIC_PROCESS
15: GOBP_REGULATION_OF_DNA_DEPENDENT_DNA_REPLICATION
16: GOBP_REGULATION_OF_DNA_METABOLIC_PROCESS
17: GOBP_REGULATION_OF_DNA_REPLICATION
18: KEGG_DNA_REPLICATION

DNA methylation/demethylation

1: GOBP_DNA_DEMETHYLATION
2: GOBP_DNA_METHYLATION
3: GOBP_DNA_METHYLATION_DEPENDENT_HETEROCHROMATIN_ASSEMBLY
4: GOBP_DNA_METHYLATION_OR_DEMETHYLATION
5: GOBP_REGULATION_OF_DNA_METHYLATION

Glucose metabolism

1: GOBP_CELLULAR_GLUCOSE_HOMEOSTASIS
2: GOBP_CELLULAR_RESPONSE_TO_GLUCOSE_STARVATION
3: GOBP_GLUCOSE_6_PHOSPHATE_METABOLIC_PROCESS
4: GOBP_GLUCOSE_CATABOLIC_PROCESS
5: GOBP_GLUCOSE_IMPORT
6: GOBP_GLUCOSE_METABOLIC_PROCESS
7: GOBP_INSULIN_SECRETION_INVOLVED_IN_CELLULAR_RESPONSE_TO_GLUCOSE_STIMULUS
8: GOBP_POSITIVE_REGULATION_OF_GLUCOSE_IMPORT
9: GOBP_POSITIVE_REGULATION_OF_GLUCOSE_METABOLIC_PROCESS
10: GOBP_POSITIVE_REGULATION_OF_GLUCOSE_TRANSMEMBRANE_TRANSPORT
11: GOBP_POSITIVE_REGULATION_OF_INSULIN_SECRETION_INVOLVED_IN_CELLULAR_RESPONSE_TO_GLUCOSE_STIMULUS
12: GOBP_REGULATION_OF_GLUCOSE_IMPORT
13: GOBP_REGULATION_OF_GLUCOSE_METABOLIC_PROCESS
14: GOBP_REGULATION_OF_GLUCOSE_TRANSMEMBRANE_TRANSPORT

Fatty acid metabolism

1: GOBP_CELLULAR_RESPONSE_TO_FATTY_ACID
2: GOBP_FATTY_ACID_BETA_OXIDATION
3: GOBP_FATTY_ACID_BETA_OXIDATION_USING_ACYL_COA_OXIDASE
4: GOBP_FATTY_ACID_BIOSYNTHETIC_PROCESS
5: GOBP_FATTY_ACID_CATABOLIC_PROCESS
6: GOBP_FATTY_ACID_DERIVATIVE_BIOSYNTHETIC_PROCESS
7: GOBP_FATTY_ACID_DERIVATIVE_CATABOLIC_PROCESS
8: GOBP_FATTY_ACID_DERIVATIVE_METABOLIC_PROCESS
9: GOBP_FATTY_ACID_HOMEOSTASIS
10: GOBP_FATTY_ACID_METABOLIC_PROCESS
11: GOBP_FATTY_ACID_TRANSMEMBRANE_TRANSPORT
12: GOBP_FATTY_ACID_TRANSPORT
13: GOBP_FATTY_ACYL_COA_BIOSYNTHETIC_PROCESS
14: GOBP_FATTY_ACYL_COA_METABOLIC_PROCESS
15: GOBP_LONG_CHAIN_FATTY_ACID_BIOSYNTHETIC_PROCESS
16: GOBP_LONG_CHAIN_FATTY_ACID_IMPORT_INTO_CELL
17: GOBP_LONG_CHAIN_FATTY_ACID_METABOLIC_PROCESS
18: GOBP_LONG_CHAIN_FATTY_ACID_TRANSPORT
19: GOBP_LONG_CHAIN_FATTY_ACYL_COA_BIOSYNTHETIC_PROCESS
20: GOBP_LONG_CHAIN_FATTY_ACYL_COA_METABOLIC_PROCESS
21: GOBP_NEGATIVE_REGULATION_OF_FATTY_ACID_METABOLIC_PROCESS
22: GOBP_POSITIVE_REGULATION_OF_FATTY_ACID_BIOSYNTHETIC_PROCESS
23: GOBP_POSITIVE_REGULATION_OF_FATTY_ACID_METABOLIC_PROCESS
24: GOBP_POSITIVE_REGULATION_OF_FATTY_ACID_OXIDATION
25: GOBP_REGULATION_OF_FATTY_ACID_BETA_OXIDATION
26: GOBP_REGULATION_OF_FATTY_ACID_BIOSYNTHETIC_PROCESS
27: GOBP_REGULATION_OF_FATTY_ACID_METABOLIC_PROCESS
28: GOBP_REGULATION_OF_FATTY_ACID_OXIDATION
29: GOBP_REGULATION_OF_FATTY_ACID_TRANSPORT
30: GOBP_RESPONSE_TO_FATTY_ACID
31: GOBP_SHORT_CHAIN_FATTY_ACID_METABOLIC_PROCESS
32: GOBP_UNSATURATED_FATTY_ACID_BIOSYNTHETIC_PROCESS
33: GOBP_UNSATURATED_FATTY_ACID_METABOLIC_PROCESS
34: GOBP_VERY_LONG_CHAIN_FATTY_ACID_METABOLIC_PROCESS
35: HALLMARK_FATTY_ACID_METABOLISM
36: KEGG_BIOSYNTHESIS_OF_UNSATURATED_FATTY_ACIDS
37: KEGG_FATTY_ACID_METABOLISM

Amino acid metabolism

1: GOBP_ACIDIC_AMINO_ACID_TRANSPORT
2: GOBP_ALPHA_AMINO_ACID_BIOSYNTHETIC_PROCESS
3: GOBP_ALPHA_AMINO_ACID_CATABOLIC_PROCESS
4: GOBP_ALPHA_AMINO_ACID_METABOLIC_PROCESS
5: GOBP_AMINO_ACID_ACTIVATION
6: GOBP_AMINO_ACID_BETAINE_METABOLIC_PROCESS
7: GOBP_AMINO_ACID_IMPORT
8: GOBP_AMINO_ACID_TRANSMEMBRANE_TRANSPORT
9: GOBP_AMINO_ACID_TRANSPORT
10: GOBP_AROMATIC_AMINO_ACID_FAMILY_CATABOLIC_PROCESS
11: GOBP_AROMATIC_AMINO_ACID_FAMILY_METABOLIC_PROCESS
12: GOBP_ASPARTATE_FAMILY_AMINO_ACID_BIOSYNTHETIC_PROCESS
13: GOBP_ASPARTATE_FAMILY_AMINO_ACID_CATABOLIC_PROCESS
14: GOBP_ASPARTATE_FAMILY_AMINO_ACID_METABOLIC_PROCESS
15: GOBP_BASIC_AMINO_ACID_TRANSPORT
16: GOBP_BRANCHED_CHAIN_AMINO_ACID_METABOLIC_PROCESS
17: GOBP_CELLULAR_AMINO_ACID_BIOSYNTHETIC_PROCESS
18: GOBP_CELLULAR_AMINO_ACID_CATABOLIC_PROCESS
19: GOBP_CELLULAR_AMINO_ACID_METABOLIC_PROCESS
20: GOBP_CELLULAR_MODIFIED_AMINO_ACID_BIOSYNTHETIC_PROCESS
21: GOBP_CELLULAR_MODIFIED_AMINO_ACID_CATABOLIC_PROCESS
22: GOBP_CELLULAR_MODIFIED_AMINO_ACID_METABOLIC_PROCESS
23: GOBP_GLUTAMINE_FAMILY_AMINO_ACID_BIOSYNTHETIC_PROCESS
24: GOBP_GLUTAMINE_FAMILY_AMINO_ACID_CATABOLIC_PROCESS
25: GOBP_GLUTAMINE_FAMILY_AMINO_ACID_METABOLIC_PROCESS
26: GOBP_L_ALPHA_AMINO_ACID_TRANSMEMBRANE_TRANSPORT
27: GOBP_L_AMINO_ACID_TRANSPORT
28: GOBP_MODIFIED_AMINO_ACID_TRANSPORT
29: GOBP_N_TERMINAL_PROTEIN_AMINO_ACID_ACETYLATION
30: GOBP_N_TERMINAL_PROTEIN_AMINO_ACID_MODIFICATION
31: GOBP_NEUTRAL_AMINO_ACID_TRANSPORT
32: GOBP_POSITIVE_REGULATION_OF_AMINO_ACID_TRANSPORT
33: GOBP_REGULATION_OF_AMINO_ACID_TRANSPORT
34: GOBP_REGULATION_OF_CELLULAR_AMINO_ACID_METABOLIC_PROCESS
35: GOBP_RESPONSE_TO_AMINO_ACID_STARVATION
36: GOBP_SERINE_FAMILY_AMINO_ACID_BIOSYNTHETIC_PROCESS
37: GOBP_SERINE_FAMILY_AMINO_ACID_METABOLIC_PROCESS
38: GOBP_SULFUR_AMINO_ACID_BIOSYNTHETIC_PROCESS
39: GOBP_SULFUR_AMINO_ACID_METABOLIC_PROCESS

TCA (Tricarboxylic Acid Cycle)

1: GOBP_TRICARBOXYLIC_ACID_CYCLE
2: KEGG_CITRATE_CYCLE_TCA_CYCLE

Cytokine

1: GOBP_CELLULAR_RESPONSE_TO_INTERFERON_BETA
2: GOBP_INTERFERON_ALPHA_PRODUCTION
3: GOBP_INTERFERON_BETA_PRODUCTION
4: GOBP_INTERFERON_GAMMA_MEDIATED_SIGNALING_PATHWAY
5: GOBP_INTERFERON_GAMMA_PRODUCTION
6: GOBP_NEGATIVE_REGULATION_OF_INTERFERON_GAMMA_PRODUCTION
7: GOBP_NEGATIVE_REGULATION_OF_TUMOR_NECROSIS_FACTOR_MEDIATED_SIGNALING_PATHWAY
8: GOBP_NEGATIVE_REGULATION_OF_TUMOR_NECROSIS_FACTOR_SUPERFAMILY_CYTOKINE_PRODUCTION
9: GOBP_NEGATIVE_REGULATION_OF_TYPE_I_INTERFERON_PRODUCTION
10: GOBP_POSITIVE_REGULATION_OF_INTERFERON_ALPHA_PRODUCTION
11: GOBP_POSITIVE_REGULATION_OF_INTERFERON_BETA_PRODUCTION
12: GOBP_POSITIVE_REGULATION_OF_INTERFERON_GAMMA_PRODUCTION
13: GOBP_POSITIVE_REGULATION_OF_TUMOR_NECROSIS_FACTOR_SUPERFAMILY_CYTOKINE_PRODUCTION
14: GOBP_POSITIVE_REGULATION_OF_TYPE_I_INTERFERON_PRODUCTION
15: GOBP_REGULATION_OF_RESPONSE_TO_INTERFERON_GAMMA
16: GOBP_REGULATION_OF_TUMOR_NECROSIS_FACTOR_MEDIATED_SIGNALING_PATHWAY
17: GOBP_REGULATION_OF_TYPE_I_INTERFERON_MEDIATED_SIGNALING_PATHWAY
18: GOBP_RESPONSE_TO_INTERFERON_ALPHA
19: GOBP_RESPONSE_TO_INTERFERON_BETA
20: GOBP_RESPONSE_TO_INTERFERON_GAMMA
21: GOBP_RESPONSE_TO_TUMOR_NECROSIS_FACTOR
22: GOBP_RESPONSE_TO_TYPE_I_INTERFERON
23: GOBP_TUMOR_NECROSIS_FACTOR_MEDIATED_SIGNALING_PATHWAY
24: GOBP_TUMOR_NECROSIS_FACTOR_SUPERFAMILY_CYTOKINE_PRODUCTION
25: GOBP_TYPE_I_INTERFERON_PRODUCTION
26: HALLMARK_IL2_STAT5_SIGNALING
27: HALLMARK_IL6_JAK_STAT3_SIGNALING
28: HALLMARK_INTERFERON_ALPHA_RESPONSE
29: HALLMARK_INTERFERON_GAMMA_RESPONSE
30: HALLMARK_TNFA_SIGNALING_VIA_NFKB
31: KEGG_JAK_STAT_SIGNALING_PATHWAY

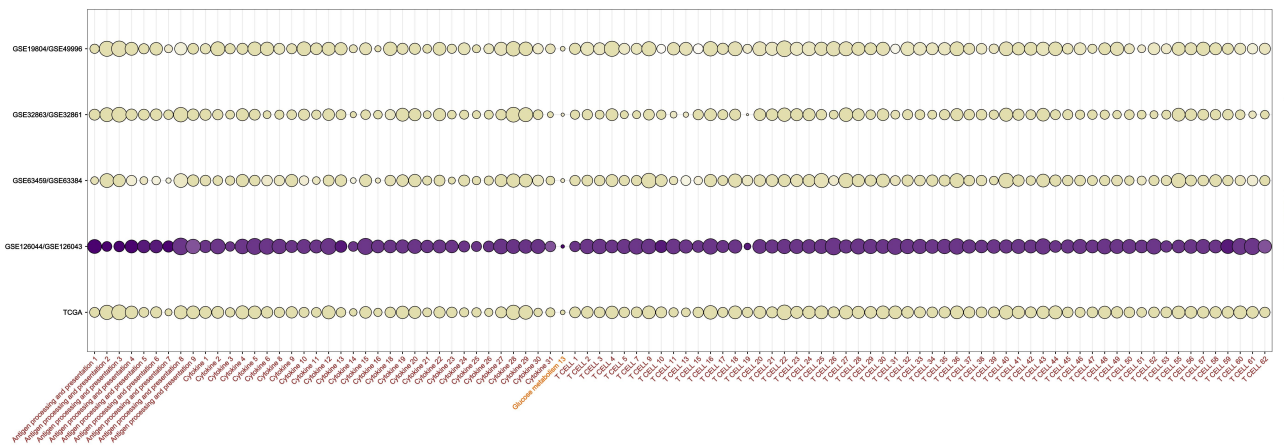
T CELL

1: GOBP_ACTIVATED_T_CELL_PROLIFERATION
2: GOBP_ALPHA_BETA_T_CELL_ACTIVATION
3: GOBP_ALPHA_BETA_T_CELL_DIFFERENTIATION
4: GOBP_ALPHA_BETA_T_CELL_PROLIFERATION
5: GOBP_CD4_POSITIVE_ALPHA_BETA_T_CELL_ACTIVATION
6: GOBP_CD4_POSITIVE_ALPHA_BETA_T_CELL_CYTOKINE_PRODUCTION
7: GOBP_CD4_POSITIVE_ALPHA_BETA_T_CELL_DIFFERENTIATION
8: GOBP_CD4_POSITIVE_OR_CD8_POSITIVE_ALPHA_BETA_T_CELL_LINEAGE_COMMITMENT
9: GOBP_CD8_POSITIVE_ALPHA_BETA_T_CELL_ACTIVATION
10: GOBP_GAMMA_DELTA_T_CELL_ACTIVATION
11: GOBP_NEGATIVE_REGULATION_OF_ALPHA_BETA_T_CELL_ACTIVATION
12: GOBP_NEGATIVE_REGULATION_OF_ALPHA_BETA_T_CELL_DIFFERENTIATION
13: GOBP_NEGATIVE_REGULATION_OF_CD4_POSITIVE_ALPHA_BETA_T_CELL_ACTIVATION
14: GOBP_NEGATIVE_REGULATION_OF_CD4_POSITIVE_ALPHA_BETA_T_CELL_DIFFERENTIATION
15: GOBP_NEGATIVE_REGULATION_OF_T_CELL_APOPTOTIC_PROCESS
16: GOBP_NEGATIVE_REGULATION_OF_T_CELL_MEDIATED_IMMUNITY
17: GOBP_NEGATIVE_REGULATION_OF_T_CELL_PROLIFERATION
18: GOBP_NEGATIVE_REGULATION_OF_T_CELL_RECEPTOR_SIGNALING_PATHWAY
19: GOBP_POSITIVE_REGULATION_OF_ACTIVATED_T_CELL_PROLIFERATION
20: GOBP_POSITIVE_REGULATION_OF_ALPHA_BETA_T_CELL_ACTIVATION
21: GOBP_POSITIVE_REGULATION_OF_ALPHA_BETA_T_CELL_DIFFERENTIATION
22: GOBP_POSITIVE_REGULATION_OF_ALPHA_BETA_T_CELL_PROLIFERATION
23: GOBP_POSITIVE_REGULATION_OF_CD4_POSITIVE_ALPHA_BETA_T_CELL_ACTIVATION
24: GOBP_POSITIVE_REGULATION_OF_CD4_POSITIVE_ALPHA_BETA_T_CELL_DIFFERENTIATION
25: GOBP_POSITIVE_REGULATION_OF_CD8_REGULATORY_T_CELL_DIFFERENTIATION
26: GOBP_POSITIVE_REGULATION_OF_T_CELL_CYTOKINE_PRODUCTION
27: GOBP_POSITIVE_REGULATION_OF_T_CELL_MEDIATED_CYTOTOXICITY
28: GOBP_POSITIVE_REGULATION_OF_T_CELL_MEDIATED_IMMUNITY
29: GOBP_POSITIVE_REGULATION_OF_T_CELL_MIGRATION
30: GOBP_POSITIVE_REGULATION_OF_T_CELL_PROLIFERATION
31: GOBP_POSITIVE_T_CELL_SELECTION
32: GOBP_REGULATION_OF_ALPHA_BETA_T_CELL_ACTIVATION
33: GOBP_REGULATION_OF_ALPHA_BETA_T_CELL_DIFFERENTIATION
34: GOBP_REGULATION_OF_CD4_POSITIVE_ALPHA_BETA_T_CELL_ACTIVATION
35: GOBP_REGULATION_OF_CD4_POSITIVE_ALPHA_BETA_T_CELL_DIFFERENTIATION
36: GOBP_REGULATION_OF_CD8_POSITIVE_ALPHA_BETA_T_CELL_ACTIVATION
37: GOBP_REGULATION_OF_T_CELL_ACTIVATION
38: GOBP_REGULATION_OF_T_CELL_APOPTOTIC_PROCESS
39: GOBP_REGULATION_OF_T_CELL_DIFFERENTIATION
40: GOBP_REGULATION_OF_T_CELL_MEDIATED_CYTOTOXICITY
41: GOBP_REGULATION_OF_T_CELL_MEDIATED_IMMUNITY
42: GOBP_REGULATION_OF_T_CELL_MIGRATION
43: GOBP_REGULATION_OF_T_CELL_RECEPTOR_SIGNALING_PATHWAY
44: GOBP_REGULATORY_T_CELL_DIFFERENTIATION
45: GOBP_T_CELL_ACTIVATION
46: GOBP_T_CELL_ACTIVATION_INVOLVED_IN_IMMUNE_RESPONSE
47: GOBP_T_CELL_APOPTOTIC_PROCESS
48: GOBP_T_CELL_CHEMOTAXIS
49: GOBP_T_CELL_CYTOKINE_PRODUCTION
50: GOBP_T_CELL_DIFFERENTIATION
51: GOBP_T_CELL_DIFFERENTIATION_IN_THYMUS
52: GOBP_T_CELL_DIFFERENTIATION_INVOLVED_IN_IMMUNE_RESPONSE
53: GOBP_T_CELL_HOMEOSTASIS
54: GOBP_T_CELL_LINEAGE_COMMITMENT
55: GOBP_T_CELL_MEDIATED_CYTOTOXICITY
56: GOBP_T_CELL_MEDIATED_IMMUNITY
57: GOBP_T_CELL_MIGRATION
58: GOBP_T_CELL_PROLIFERATION
59: GOBP_T_CELL_RECEPTOR_SIGNALING_PATHWAY
60: GOBP_T_CELL_SELECTION
61: GOBP_THYMIC_T_CELL_SELECTION
62: KEGG_T_CELL_RECEPTOR_SIGNALING_PATHWAY

Antigen processing and presentation

1: GOBP_ANTIGEN_PROCESSING_AND_PRESENTATION
2: GOBP_ANTIGEN_PROCESSING_AND_PRESENTATION_OF_ENDOGENOUS_ANTIGEN
3: GOBP_ANTIGEN_PROCESSING_AND_PRESENTATION_OF_ENDOGENOUS_PEPTIDE_ANTIGEN
4: GOBP_ANTIGEN_PROCESSING_AND_PRESENTATION_OF_EXOGENOUS_PEPTIDE_ANTIGEN_VIA_MHC_CLASS_I
5: GOBP_ANTIGEN_PROCESSING_AND_PRESENTATION_OF_PEPTIDE_ANTIGEN
6: GOBP_ANTIGEN_PROCESSING_AND_PRESENTATION_OF_PEPTIDE_ANTIGEN_VIA_MHC_CLASS_I
7: GOBP_ANTIGEN_PROCESSING_AND_PRESENTATION_OF_PEPTIDE_OR_POLYSACCHARIDE_ANTIGEN_VIA_MHC_CLASS_II
8: GOBP_REGULATION_OF_ANTIGEN_PROCESSING_AND_PRESENTATION
9: KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION

C



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