Supplementary table S3: Gene ontology analysis of differentially methylated genes in SpF.

Hypermethylated in SpF

	Fisher	
Term	Exact	GO category
female pregnancy	8,2E-5	Biological process (3)
germ-line stem cell maintenance	1,6E-4	Biological process (3)
digestive system process	9,2E-3	Biological process (3)
ovulation cycle	1,1E-2	Biological process (3)
sex differentiation	1,3E-2	Biological process (3)
male sex differentiation	1,4E-2	Biological process (3)
ovarian follicle development	1,5E-2	Biological process (3)
regulation of cell size	1,7E-2	Biological process (3)
reproductive cellular process	1,8E-2	Biological process (3)
reproductive process in a multicellular organism	2,2E-2	Biological process (3)
gamete generation	3,0E-2	Biological process (3)
mitochondrion organization	3,2E-2	Biological process (3)
circulatory system process	3,2E-2	Biological process (3)
secretion	3,9E-2	Biological process (3)
negative regulation of cell proliferation	4,2E-2	Biological process (3)
male gamete generation	4,4E-2	Biological process (3)

	Fisher	
Term	Exact	GO category
germ-line stem cell maintenance	1,5E-4	Biological process (5)
pancreatic juice secretion	9,0E-4	Biological process (5)
positive regulation of myeloid leukocyte		
differentiation	1,3E-3	Biological process (5)
negative regulation of mitotic cell cycle	2,4E-3	Biological process (5)
stem cell maintenance	3,5E-3	Biological process (5)
stem cell development	3,9E-3	Biological process (5)
gene silencing	5,0E-3	Biological process (5)
positive regulation of myeloid cell differentiation	7,7E-3	Biological process (5)
male sex differentiation	1,3E-2	Biological process (5)
cartilage development	1,3E-2	Biological process (5)
ovarian follicle development	1,4E-2	Biological process (5)
regulation of myeloid leukocyte differentiation	1,4E-2	Biological process (5)
meiosis I	1,5E-2	Biological process (5)
regulation of gene expression, epigenetic	1,5E-2	Biological process (5)
ribonucleotide biosynthetic process	1,9E-2	Biological process (5)
nucleobase, nucleoside, nucleotide and nucleic		
acid biosynthetic process	3,3E-2	Biological process (5)
nucleobase, nucleoside and nucleotide	3,3E-2	Biological process (5)

biosynthetic process		
negative regulation of cell proliferation	3,5E-2	Biological process (5)
spermatogenesis	3,8E-2	Biological process (5)

Hypomethylated in SpF

	Fisher	
Term	Exact	GO category
defense response	1,2E-7	Biological process (3)
regulation of immune system process	2,8E-7	Biological process (3)
taxis	7,5E-7	Biological process (3)
chemotaxis	7,5E-7	Biological process (3)
positive regulation of biological process	7,8E-7	Biological process (3)
positive regulation of cellular process	1,1E-6	Biological process (3)
cell chemotaxis	1,5E-6	Biological process (3)
locomotory behavior	1,5E-5	Biological process (3)
leukocyte chemotaxis	1,6E-5	Biological process (3)
regulation of response to stimulus	2,0E-5	Biological process (3)
regulation of multicellular organismal process	2,1E-5	Biological process (3)
regulation of immune response	3,3E-5	Biological process (3)
regulation of leukocyte activation	3,7E-5	Biological process (3)
response to wounding	4,1E-5	Biological process (3)
positive regulation of response to stimulus	5,2E-5	Biological process (3)
positive regulation of immune system process	5,6E-5	Biological process (3)
positive regulation of protein transport	5,9E-5	Biological process (3)
positive regulation of immune response	6,1E-5	Biological process (3)
regulation of cell activation	6,1E-5	Biological process (3)
regulation of cellular localization	8,6E-5	Biological process (3)
immune effector process	1,7E-4	Biological process (3)
negative regulation of immune system process	2,3E-4	Biological process (3)
regulation of transport	2,7E-4	Biological process (3)
homeostatic process	3,2E-4	Biological process (3)
positive regulation of protein secretion	3,3E-4	Biological process (3)
regulation of cytokine production	3,7E-4	Biological process (3)
positive regulation of cell proliferation	4,6E-4	Biological process (3)
positive regulation of immune effector process	4,7E-4	Biological process (3)
regulation of leukocyte mediated cytotoxicity	4,7E-4	Biological process (3)
positive regulation of transport	5,1E-4	Biological process (3)
multicellular organismal catabolic process	5,5E-4	Biological process (3)
regulation of cell killing	7,3E-4	Biological process (3)
regulation of localization	7,6E-4	Biological process (3)
cell volume homeostasis	1,0E-3	Biological process (3)
regulation of protein localization	1,1E-3	Biological process (3)
humoral immune response	1,1E-3	Biological process (3)
phospholipid translocation	1,3E-3	Biological process (3)
response to other organism	1,3E-3	Biological process (3)

regulation of cell proliferation	1,5E-3	Biological process (3)
negative regulation of leukocyte activation	1,5E-3	Biological process (3)
leukocyte mediated immunity	1,7E-3	Biological process (3)
negative regulation of cell activation	2,1E-3	Biological process (3)
		Biological process (3)
response to bacterium	2,4E-3	Biological process (3)
tissue homeostasis	2,4E-3	Biological process (3)
regulation of response to external stimulus	2,6E-3	Biological process (3)
regulation of response to stress	2,7E-3	· · · · · ·
positive regulation of homeostatic process	2,8E-3	Biological process (3)
positive regulation of calcium ion transport into cytosol	3,1E-3	Biological process (3)
negative regulation of glutamate secretion	3,1E-3	Biological process (3)
positive regulation of ion transport	3,4E-3	Biological process (3)
positive regulation of leukocyte mediated	3,46-3	Biological process (3)
cytotoxicity	3,5E-3	Biological process (o)
innate immune response	4,5E-3	Biological process (3)
positive regulation of defense response	4,6E-3	Biological process (3)
cellular alkene metabolic process	4,6E-3	Biological process (3)
tissue development	4,8E-3	Biological process (3)
positive regulation of leukocyte activation	5,0E-3	Biological process (3)
positive regulation of cell killing	5,2E-3	Biological process (3)
positive regulation of secretion	5,7E-3	Biological process (3)
response to virus	5,7E-3	Biological process (3)
positive regulation of cell activation	6,2E-3	Biological process (3)
negative regulation of hormone secretion	6,5E-3	Biological process (3)
positive regulation of organelle organization	7,8E-3	Biological process (3)
regulation of binding	7,9E-3	Biological process (3)
negative regulation of lipid metabolic process	8,0E-3	Biological process (3)
lymphocyte homeostasis	8,0E-3	Biological process (3)
cell migration	8,3E-3	Biological process (3)
regulation of calcium ion transport into cytosol	8,9E-3	Biological process (3)
negative regulation of secretion	8,9E-3	Biological process (3)
leukocyte activation	1,0E-2	Biological process (3)
multicellular organismal macromolecule metabolic	,	Biological process (3)
process	1,1E-2	
negative regulation of multicellular organismal		Biological process (3)
process	1,1E-2	D: 1 · 1 (0)
signal transduction	1,2E-2	Biological process (3)
regulation of angiogenesis	1,4E-2	Biological process (3)
organ development	1,5E-2	Biological process (3)
positive regulation of response to external stimulus	1,5E-2	Biological process (3)
cell-substrate adhesion	1,5E-2	Biological process (3)
positive regulation of locomotion	1,5E-2	Biological process (3)
negative regulation of transport	1,5E-2	Biological process (3)
response to drug	1,5E-2	Biological process (3)
regulation of organelle organization	1,6E-2	Biological process (3)
positive regulation of macromolecule metabolic	1 65 0	Biological process (3)
process	1,6E-2	

cell motility	1,7E-2	Biological process (3
negative regulation of biological process	1,7E-2	Biological process (3
positive regulation of cellular component organization	1,9E-2	Biological process (3
regulation of cell death	1,9E-2	Biological process (3
regulation of developmental process	2,3E-2	Biological process (3
positive regulation of cell communication	2,5E-2	Biological process (3
cellular chemical homeostasis	2,7E-2	Biological process (3
lymphocyte activation	2,9E-2	Biological process (3
positive regulation of biosynthetic process	3,0E-2	Biological process (3
positive regulation of metabolic process	3,3E-2	Biological process (3
regulation of cell communication	3,5E-2	Biological process (3
secretion	3,5E-2	Biological process (3
positive regulation of cellular metabolic process	3,8E-2	Biological process (3
transmembrane transport	4,5E-2	Biological process (3
negative regulation of cellular process	4,9E-2	Biological process (3

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Term	Exact	GO category
chemotaxis	3,7E-7	Biological process (5)
cell chemotaxis	9,8E-7	Biological process (5)
leukocyte chemotaxis	1,1E-5	Biological process (5)
regulation of leukocyte activation	2,1E-5	Biological process (5)
positive regulation of immune response	3,6E-5	Biological process (5)
positive regulation of protein transport	4,0E-5	Biological process (5)
positive regulation of adaptive immune response		Biological process (5)
based on somatic recombination of immune		
receptors built from immunoglobulin superfamily	5 4F 5	
domains	5,4E-5	Dialogical process (5)
protein kinase cascade	6,2E-5	Biological process (5)
positive regulation of adaptive immune response	6,4E-5	Biological process (5)
positive regulation of leukocyte mediated immunity	1,0E-4	Biological process (5)
positive regulation of lymphocyte mediated	4.05.4	Biological process (5)
immunity	1,0E-4	Dialogical process (5)
regulation of lymphocyte mediated immunity	1,0E-4	Biological process (5)
regulation of adaptive immune response based on		Biological process (5)
somatic recombination of immune receptors built from immunoglobulin superfamily domains	1,1E-4	
regulation of adaptive immune response	1,1E-4 1,3E-4	Biological process (5)
-	1,3E-4	Biological process (5)
regulation of secretion	,	Biological process (5)
leukocyte migration	1,4E-4	
negative regulation of macrophage activation	1,9E-4	Biological process (5)
regulation of protein transport	2,0E-4	Biological process (5)
regulation of leukocyte mediated immunity	2,0E-4	Biological process (5)
positive regulation of cell proliferation	2,3E-4	Biological process (5)
regulation of lymphocyte activation	2,3E-4	Biological process (5)
positive regulation of protein secretion	2,5E-4	Biological process (5)
regulation of establishment of protein localization	2,9E-4	Biological process (5)
positive regulation of transport	3,0E-4	Biological process (5)

positive regulation of immune effector process	3,5E-4	Biological process (5)
regulation of leukocyte mediated cytotoxicity	3,7E-4	Biological process (5)
regulation of immune effector process	5,7E 4 5,3E-4	Biological process (5)
negative regulation of lipid catabolic process	6,9E-4	Biological process (5)
regulation of glutamate secretion	6,9E-4	Biological process (5)
	8,7E-4	Biological process (5)
cell volume homeostasis		Biological process (5)
regulation of defense response	8,9E-4	Biological process (5)
regulation of metal ion transport	9,4E-4	Biological process (5)
defense response to bacterium	9,8E-4	· · · · · ·
lipid translocation	1,1E-3	Biological process (5)
phospholipid translocation	1,1E-3	Biological process (5)
negative regulation of interleukin-2 biosynthetic	1 1 5 2	Biological process (5)
process	1,1E-3	Biological process (5)
negative regulation of leukocyte activation	1,2E-3	Biological process (5)
regulation of T cell activation	1,3E-3	
regulation of protein secretion	1,3E-3	Biological process (5)
negative regulation of cell activation	1,6E-3	Biological process (5)
tissue homeostasis	1,8E-3	Biological process (5)
regulation of interleukin-2 biosynthetic process	2,2E-3	Biological process (5)
positive regulation of homeostatic process	2,3E-3	Biological process (5)
positive regulation of lymphocyte activation	2,4E-3	Biological process (5)
tissue development	2,4E-3	Biological process (5)
acute inflammatory response	2,5E-3	Biological process (5)
positive regulation of calcium ion transport into		Biological process (5)
cytosol	2,6E-3	D: 1 · 1 /c/
regulation of ion transport	2,6E-3	Biological process (5)
positive regulation of ion transport	2,7E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate	2,7E-3	
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan	2,7E-3 2,8E-3	Biological process (5) Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion	2,7E-3 2,8E-3 2,8E-3	Biological process (5) Biological process (5) Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway	2,7E-3 2,8E-3	Biological process (5) Biological process (5) Biological process (5) Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated	2,7E-3 2,8E-3 2,8E-3 2,9E-3	Biological process (5) Biological process (5) Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion	2,7E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3 3,9E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation	2,7E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3 3,9E-3 4,2E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3 4,2E-3 4,2E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response positive regulation of secretion	2,7E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3 3,9E-3 4,2E-3 4,2E-3 4,2E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response positive regulation of secretion positive regulation of cell activation	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3 4,2E-3 4,2E-3 4,2E-3 4,6E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response positive regulation of secretion positive regulation of cell activation cell migration	2,7E-3 2,8E-3 2,9E-3 3,0E-3 3,5E-3 3,7E-3 3,9E-3 4,2E-3 4,2E-3 4,6E-3 5,5E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response positive regulation of secretion positive regulation of cell activation cell migration negative regulation of hormone secretion	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,7E-3 3,9E-3 4,2E-3 4,2E-3 4,2E-3 4,6E-3 5,5E-3 5,5E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response positive regulation of secretion positive regulation of cell activation cell migration negative regulation of hormone secretion regulation of lipid catabolic process	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3 3,5E-3 3,7E-3 4,2E-3 4,2E-3 4,2E-3 4,6E-3 5,5E-3 5,5E-3 5,5E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response positive regulation of secretion positive regulation of cell activation cell migration negative regulation of hormone secretion regulation of lipid catabolic process unsaturated fatty acid metabolic process	2,7E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3 4,2E-3 4,2E-3 4,2E-3 4,6E-3 5,5E-3 5,5E-3 5,5E-3 5,5E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response positive regulation of secretion positive regulation of cell activation cell migration negative regulation of hormone secretion regulation of lipid catabolic process	2,7E-3 2,8E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3 4,2E-3 4,2E-3 4,2E-3 4,6E-3 5,5E-3 5,5E-3 5,5E-3 6,1E-3	Biological process (5)
positive regulation of ion transport peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan negative regulation of glutamate secretion cytokine-mediated signaling pathway positive regulation of leukocyte mediated cytotoxicity regulation of transcription factor activity positive regulation of defense response positive regulation of leukocyte activation response to mercury ion positive regulation of T cell activation regulation of inflammatory response positive regulation of secretion positive regulation of cell activation cell migration negative regulation of hormone secretion regulation of lipid catabolic process unsaturated fatty acid metabolic process	2,7E-3 2,8E-3 2,9E-3 3,0E-3 3,2E-3 3,5E-3 3,7E-3 4,2E-3 4,2E-3 4,2E-3 4,6E-3 5,5E-3 5,5E-3 5,5E-3 5,5E-3	Biological process (5)

positive regulation of transferase activity 6,7E-3 Biological process (5) negative regulation of lipid metabolic process 6,8E-3 Biological process (5) negative regulation of lymphocyte proliferation 7,3E-3 Biological process (5) negative regulation of secretion 7,3E-3 Biological process (5) negative regulation of secretion 7,3E-3 Biological process (5) regulation of calcium ion transport into cytosol 7,5E-3 Biological process (5) doubt of vessel development 7,6E-3 Biological process (5) positive regulation of leukocyte proliferation 7,7E-3 Biological process (5) positive regulation of mononuclear cell proliferation 7,7E-3 Biological process (5) positive regulation of mononuclear cell proliferation 7,7E-3 Biological process (5) positive regulation of interleukin-2 production 8,3E-3 Biological process (5) positive regulation of inflammatory response 8,3E-3 Biological process (5) positive regulation of macromolecule metabolic process (5) positive regulation of macromolecule metabolic process (5) positive regulation of signal transduction 8,6E-3 Biological process (5) positive regulation of signal transduction 8,6E-3 Biological process (5) vasculature development 8,8E-3 Biological process (5) vasculature development 8,8E-3 Biological process (5) positive regulation of protein kinase cascade 9,1E-3 Biological process (5) positive regulation of programmed cell death 9,6E-3 Biological process (5) positive regulation of macromolecule biosynthetic process (5) positive regulation of macromolecule biosynthetic process (5) positive regulation of calcium ion transport 1,1E-2 Biological process (5) positive regulation of response to external stimulus 1,2E-2 Biological process (5) regulation of amine transport 1,2E-2 Biological process (5) positive regulation of phosphote metabolic process (5) Biological process (5) positive regulation of cellular biosynthetic process 1,3E-2 Biological process (5) positive regulation of cellular biosynthetic process 1,3E-2 Biological process (5) positive regulation of cellular biosynthetic pr	regulation of mononuclear cell proliferation	6,4E-3	Biological process (5)
negative regulation of lipid metabolic process 6,8E-3 Biological process (5) positive regulation of hymphocyte proliferation 7,3E-3 Biological process (5) regulation of secretion 7,3E-3 Biological process (5) regulation of calcium ion transport into cytosol 7,5E-3 Biological process (5) complement activation, classical pathway 7,5E-3 Biological process (5) blood vessel development 7,6E-3 Biological process (5) blood vessel development 7,6E-3 Biological process (5) positive regulation of leukocyte proliferation 7,7E-3 Biological process (5) positive regulation of mononuclear cell proliferation 7,7E-3 Biological process (5) positive regulation of mononuclear cell proliferation 8,3E-3 Biological process (5) positive regulation of inflammatory response 8,3E-3 Biological process (5) regulation of inflammatory response 8,3E-3 Biological process (5) positive regulation of macromolecule metabolic process (5) positive regulation of signal transduction 8,6E-3 Biological process (5) positive regulation of signal transduction 8,6E-3 Biological process (5) positive regulation of protein kinase cascade 9,1E-3 Biological process (5) positive regulation of protein kinase cascade 9,1E-3 Biological process (5) positive regulation of protein kinase cascade 9,1E-3 Biological process (5) positive regulation of macromolecule biosynthetic process (5) positive regulation of macromolecule biosynthetic process (5) positive regulation of macromolecule biosynthetic process (5) positive regulation of calcium ion transport 1,1E-2 Biological process (5) regulation of angiogenesis 1,2E-2 Biological process (5) positive regulation of phosphorus metabolic process (5) Biological process (5) positive regulation of phosphorus metabolic process (5) Biological process (5) positive regulation of phosphorus metabolic process (5) Biological process (5) positive regulation of phosphorus metabolic process (5) Biological process (5) positive regulation of of phosphorus metabolic process (6) Biological process (5) positive regulation of cellular biosynthet	·		
positive regulation of lymphocyte proliferation 7,3E-3 Biological process (5) negative regulation of secretion 7,3E-3 Biological process (5) complement activation, classical pathway 7,5E-3 Biological process (5) positive regulation of leukocyte proliferation 7,7E-3 Biological process (5) positive regulation of mononuclear cell proliferation positive regulation of mononuclear cell proliferation 8,3E-3 Biological process (5) positive regulation of interleukin-2 production 8,3E-3 Biological process (5) regulation of interleukin-2 production 8,3E-3 Biological process (5) positive regulation of inflammatory response 8,3E-3 Biological process (5) positive regulation of macromolecule metabolic process (5) asculature development 8,8E-3 Biological process (5) regulation of apoptosis 8,7E-3 Biological process (5) asculature development 8,8E-3 Biological process (5) positive regulation of protein kinase cascade 9,1E-3 Biological process (5) regulation of programmed cell death 9,6E-3 Biological process (5) positive regulation of macromolecule biosynthetic process (5) positive regulation of macromolecule biosynthetic process (5) positive regulation of macromolecule biosynthetic process (5) Biological process (5)	· · · · · · · · · · · · · · · · · · ·	· '	• • • • • •
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	T cell activation	3,2E-2	Biological process (5)

positive regulation of gene expression	3,3E-2	Biological process (5)
endocytosis	3,5E-2	Biological process (5)
positive regulation of transcription, DNA-		Biological process (5)
dependent	3,6E-2	
positive regulation of nitrogen compound metabolic		Biological process (5)
process	3,6E-2	
positive regulation of RNA metabolic process	3,8E-2	Biological process (5)
regulation of signal transduction	3,8E-2	Biological process (5)
epithelium development	4,0E-2	Biological process (5)