Genes gained in Geoplanidae BP TreeMap

		Conec ge	mod m Gooplamaa	Bi neemap	
positive astrocyte	positive regulation tyrosii	tyrosine	regulation mitotic	replication DNA double-stran break processing involved in repair vi	positive positive regulation of steroid peptidyl-cysteine protein positive regulation of steroid peptidyl-cysteine protein positive regulation regulation peptidyl-cysteine protein positive regulation regulatio
regulation of activation	regulation phosphor	rylation of STAT protein tau-protein fructose 1,6-bisph tau-protein	sphate	tork involved in repair vi synthesis-depende strand annealing	nitric oxide biosynthetic S-nitrosylation nitrosylation of signaling neurotransmitter signaling
nematode male macrophage differentiation macrophage differentiation	of protein of STAT p	protein kinase activity	activity telomeric 3'	gene	biosynthetic signaling pathway activity pathway
tail tip biomineral tissue	deacetylation positive req		tRNA-type	logous at gene nuclear-transcribe	process fructose nitric oxide protein sulfate T cell regulation
morphogenesis development	of fruct positive 1,6-bispho		recom	mating-type conversion tail shortening	metabolic process proc
determination negative positive	regulation of	process metabolic process process respirati			regulation of vitamin pattern recognition way via
of left/right regulation of CD4-positive,	peptidyl-tyrosine positive pos	ion of positive positive positive positive	ye vi	eic acid meiotic DNA DNA double-strand cataboli	of vital proteoglycan metabolic process spicy with biosynthetic living with the living with t
asymmetry in myeloid cell alpha-beta T cell development development	ph positive regulat	tion of protein phosphorylation	ease	nodiester formation process	process proces
nervous differentiation differentiation system positive	positive proteol	phosphorylation metabolic		ydrolysis somatic recombination nucleic	protocolycop somatic protein signaling signaling pathway pathway signaling
negative mating regulation regulation CD4-positive, alpha-beta T cell alpha-beta	regulation of positive required at particular	regulation of positive	meiotic DNA process	homologous of acid-template transcription	metabolic megative metabolic modification genes involved in process in proces
ascospore of leukocata type of myeloid differentiation of leukocata type of myeloid differentiation involved in involved in differentiation of differentiation of myeloid differentiati	amyloid-beta of peptidyl-	peptidyl-tyrosine regulation regulation	The second secon	CESS gene segments llation nucleic acid RNA	regulation of telomere maintenance via mittric oxide nitric oxide mittric oxide nitric oxide normal response to the vacuole pathway signaling pathway signal
formation	formation STAT pro	rotein phosphorylation kinase activity	recombination	DNA transcription, phosphodiester biosynthet	regulation of recoptor metabolic of isotype records of regulation of regulation of recoptor responses—activating responses—activating responses—activating responses—activating responses—activating recoptor records recor
positive mating type myelinotics sporulation determination biogeometric	positive regulation regulat	positive regulation posi	ve telemere meiotic DNA	cess hydrolysis process	process switching DNA replication signaling pathway signal transduction signaling pathway signal transduction signal signal transduction signal
regulation of determination	of tyrosine of prot phosphorylation of ADP-ribos	tein egulation of	double-strand reg	ulation somatic DNA somatic DNA immune receptors via biosynthetic cell DNA	CENP-A mitotic remodeling at remodeling at
osteoclast connective somatic diversification diversification diversification to diversification of diversification diversification diversification of diversificatio	STAT protein	autophagy activity activ	capping break processing recon	bination within a single locus process recombination	kinetochore containing assembly centromere regulation of localization of cation of of eating of eating
differentiation positive tissue of immune regulation development development receptors response	mei	spindle	viral actin-dependent	viral modulation	assembly assembly signaling signaling assembly
regulation of occyte of neuron somatic germarium-derived ascospore	meiotic nucl	to meiosi	perietration transport of	release by host virion	regulation regulation
osteoclast maturation differentiation of differentiation of differentiation of differentiation	cell cycle divis	sion process kinetocho	into host virus	from host of viral assemble	regulation negative regulation of protein negative regulation of protein negative
epithelial cell female ectodermal embryonic ectodermal	spino	sister	Hadicas	ceii	outer membrane assembly division of nuclear division of nuclear division outer membrane assembly division of nuclear division of nuclear division outer membrane assembly division of nuclear division outer membrane assembly division
regulation of differentiation formation development digestive tract development	pole b	chromatid cohesion microtubules fro	viral budding entry	ransport intracellular adhesion of transport symbiont transport	translocase centromere cell—cell fungal—type cation channel regulation to adherens junction adherens j
cell morphogenesis resulting in cyst digestive tract	organiz	Segregation melosis i kinetochore mite	from modern into host	of virus of virus host cell	complex assembly complex assembly assem
differentiation formation of a cellular spore formation digestive tract morphogenesis morphogenesis	cell cycle	ter mitotic cell cycle spino	le mombrano	usion of virus membrane fusion viral	endosome microtubule ascospore cell-substrate cell-
negative positive	segreg	division Process	viral	process viral entry into host cell packaging	organization nucleation nucleation assembly assembly assembly assembly assembly assembly and nucleation assembly assembl
cell division transmembrane of smooth regulation	meiosis I	mitotic sister of sister	viral cancid process	adhesion of transport of evit from	negative regulation positive positive regulation
transport muscle cell of cell	cell cycle meiotic	spindle	viiai capsiu	symbiont to multicellular host cel	regulation of response regulation regulation of numoral regulation regulation of response regulation regulatio
proliferation division	process	sion regulation of reciprocal mitotic	of viral	viral exit of	to cytokine to cytokine to external defense to biotic
killing of regulation of regulation of regulation from regulation of regulation of regulation positive regulation		meiotic nuclear meiotic chrom division recombination cohes	aud	nigration movement budding virus in host from from hos	stimulus stimulus response response response stimulus response res
cells of other killing of smooth muscle apoptotic smooth page apoptotic	chrom	natid Meiosis II sister centri	ole	ransport of non-lytic membrane cell nucleus	negative regulation of response tion positive regulation regulatio
organism cells of other organism cells of other organism cell apoptotic component process component biogenesis	division segreg	gation cell cycle chromatid cohesion replica	tion	irus in host, viral viral	regulation innate imm to external stimulus set of innate by immune of immune
regulation of modulation by modulation regulation of	positive pos	sitive positive regulation regulation of regulation	host cell cycle	cell to cell release transcription	response innate immune response-activating response respo
killing of symbiont of of host smooth muscle regulation of	regulation of regula	ation of of tumor necrosis interleukin–1 interleukin surkin 12 factor superfamily beta	-12 proteinsertion	into protein localization	positive regulation of regulation of regulation of regulation regu
cells of other host apoptotic regulation of cell killing complex assembly	· · · · ·	duction cytokine production production production	mitochor	localization to	inflammatory response innate immune control inflammatory response
organism	production	positive regulation of interleukin–8 regulation of regulat	ion transport membra		positive pos
positive communication by virus of of glial regulation of cellular of	negative regula	ation of production interleukin–8 production of immune in interleukin–8	protein protein import int	iron ion import into intracellular protein	regulation sentum division regulation of mitotic division regulation of mitotic division regulation of mediated immunity host TBK1
regulation of by electrical host STAT2 cell component secretion	interied	eukin-23 production	positive regulation mitochondi	transmembrane peroxisome transmembrane transport	of primary assembly a
neuron death cellular positive regulation	interleuki regulation	n of cytokine production factor	of protein it intracellu	ılar protein ion peptide	cell septum primary cell positive regulation regulation of immune of immune of immune response of leukocyte by virus of suppression by
positive regulation regulation to biotic cell junction cycle phase	production positive of tumor	regulation inflammatory immune tactor production production response response	into nuclitransmemb	ane transport ide hormon	
chromosome of mast cell transmission, stimulus assembly transition	superfami	(ligand) regulation of regulat	import into		
segregation activation cholinergic regulation of establishment	positive positive 11 pro	oduction production of molecular mediator of production production production production production	regulation protein intracellula organelle	of peptide peptide hormon	initiation of mitotic regulation of cell septum to molecule of response in the control of the control of the cell septum to molecule of response in the control of the cell septum to molecule of response in the cell septum to molecule of res
regulation regulation proliferation proliferation polarity	of of	n of cytokine positive regulation regulation umor necrosis	of insulin insertion into mitochondrial	secretion secretio	signaling biogenesis biogenesis cytokinesis assembly antimicrobial pepti response to molecule bacterium
of cell of neuronal myeloid cell pulsoryte cell positive regulation	cytokine chemokine production	on involved in regulation of of of superfamily immur	secretion of secretion outer membrane prostagland secretion	IIISUIIII CVIOSOIIC FIRM	cell septum cellular bud site regulation of mitotic of
transport killing potential leukocyte activation killing of B cell activation	production production inhammatic	factor chemokine production production cytokine production production	Scoretion	secretion transport membrane	cell cycle septum for fundis bacterial response