

Table S2. GO enrichment analysis

Red vs White			Blue vs White			Red vs Blue		
#GO_classify	All gene	DIFF gene	#GO_classify	All gene	DIFF gene	#GO_classify	All gene	DIFF gene
cellular component			cellular component			cellular component		
extracellular region	4040	489	extracellular region	4040	677	extracellular region	4040	122
cell	32758	3014	cell	32758	4276	cell	32758	1067
nucleoid	62	3	nucleoid	62	7	nucleoid	62	1
membrane	12944	1300	membrane	12944	1911	membrane	12944	465
virion	85	1	virion	85	7	virion	85	1
cell junction	3009	365	cell junction	3009	531	cell junction	3009	87
extracellular matrix	80	13	extracellular matrix	80	19	extracellular matrix	80	3
membrane-enclosed lumen	889	48	membrane-enclosed lumen	889	71	membrane-enclosed lumen	889	17
macromolecular complex	4675	230	macromolecular complex	4675	320	macromolecular complex	4675	95
organelle	26442	2271	organelle	26442	3233	organelle	26442	866
extracellular matrix part	14	2	extracellular matrix part	14	3	extracellular matrix part	14	1
extracellular region part	185	27	extracellular region part	185	34	extracellular region part	185	4
organelle part	8200	551	organelle part	8200	820	organelle part	8200	304
virion part	85	1	virion part	85	7	virion part	85	1
membrane part	7043	709	membrane part	7043	1049	membrane part	7043	263
cell part	32662	2992	cell part	32662	4243	cell part	32662	1059
molecular function			molecular function			molecular function		
protein binding			protein binding			protein binding		
transcription factor activity	164	8	transcription factor activity	164	14	transcription factor activity	164	8
nucleic acid binding			nucleic acid binding			nucleic acid binding		
transcription factor activity	3010	353	transcription factor activity	3010	490	transcription factor activity	3010	98
catalytic activity	16998	1665	catalytic activity	16998	2392	catalytic activity	16998	593
receptor activity	1142	176	receptor activity	1142	255	receptor activity	1142	23
guanyl-nucleotide exchange factor activity	70	3	guanyl-nucleotide exchange factor activity	70	6	guanyl-nucleotide exchange factor activity	70	3
structural molecule activity	1024	49	structural molecule activity	1024	60	structural molecule activity	1024	26
transporter activity	2562	265	transporter activity	2562	378	transporter activity	2562	105
binding	21000	1902	binding	21000	2700	binding	21000	657
electron carrier activity	680	77	electron carrier activity	680	118	electron carrier activity	680	34
antioxidant	300	38	antioxidant	300	48	antioxidant	300	18

activity			activity			activity		
channel regulator			channel regulator			channel regulator		
activity	13	2	activity	13	5	activity	13	1
metallochaperone			metallochaperone			metallochaperone		
activity	14	3	activity	14	2	activity	14	0
enzyme regulator			enzyme regulator			enzyme regulator		
activity	659	64	activity	659	85	activity	659	18
protein tag	14	0	protein tag	14	1	protein tag	14	0
translation			translation			translation		
regulator activity	6	0	regulator activity	6	0	regulator activity	6	0
nutrient reservoir			nutrient reservoir			nutrient reservoir		
activity	104	5	activity	104	11	activity	104	1
molecular			molecular			molecular		
transducer			transducer			transducer		
activity	1447	213	activity	1447	308	activity	1447	39
biological process			biological process			biological process		
reproduction	1241	92	reproduction	1241	120	reproduction	1241	27
cell killing	64	6	cell killing	64	5	cell killing	64	1
immune system			immune system			immune system		
process	1476	343	process	1476	464	process	1476	45
metabolic process	24278	2283	metabolic process	24278	3292	metabolic process	24278	824
cellular process	24660	2339	cellular process	24660	3347	cellular process	24660	836
reproductive			reproductive			reproductive		
process	4020	284	process	4020	400	process	4020	101
biological			biological			biological		
adhesion	194	9	adhesion	194	14	adhesion	194	1
signaling	4773	785	signaling	4773	1096	signaling	4773	155
multicellular			multicellular			multicellular		
organismal			organismal			organismal		
process	5699	474	process	5699	682	process	5699	164
developmental			developmental			developmental		
process	7581	625	process	7581	894	process	7581	221
growth	1596	140	growth	1596	182	growth	1596	38
locomotion	60	3	locomotion	60	3	locomotion	60	2
single-organism			single-organism			single-organism		
process	22687	2308	process	22687	3271	process	22687	803
rhythmic process	268	31	rhythmic process	268	40	rhythmic process	268	19
response to			response to			response to		
stimulus	14364	1848	stimulus	14364	2616	stimulus	14364	592
localization	8138	934	localization	8138	1272	localization	8138	303
multi-organism			multi-organism			multi-organism		
process	3393	648	process	3393	877	process	3393	140
biological			biological			biological		
regulation	14272	1531	regulation	14272	2183	regulation	14272	491
cellular			cellular			cellular		
component			component			component		
organization or			organization or			organization or		
biogenesis	8604	741	biogenesis	8604	1054	biogenesis	8604	275