

Table S3. GWAS CC7.

Gene	Non-unique Gene name	Annotation	Number_pos _present_in	Number_neg _present_in	Number_pos_n ot_present_in	Number_neg_n ot_present_in	Sensi tivity	Specificity	Odds _ratio	Naive_p
hin_1	hin_1	DNA-invertase hin	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2727		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
mco	mco	Multicopper oxidase mco	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2712		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2708		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2707		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2703		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2702		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2701		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2700		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
cadA	cadA	cadmium resistance protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2692		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
hin_2	hin_2	DNA-invertase hin	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2691		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2690		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2686		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505

group _987		hypothetical protein	0	182	1	4	0.0	2.15053763 44086025	0.0	0.026737967 914438505
group _2736		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2731		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2730		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
TSFM	TSFM	Elongation factor Ts mitochondrial	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2726		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2725		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2724		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2723		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2720		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2719		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2717		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2716		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
npr	npr	NADH peroxidase	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2715		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2713		IS6 family transposase ISLmo4	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2711		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2710		IS6 family transposase IS1297	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262

group _2709		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2706		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2705		Tn3 family transposase	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
soj	soj	Chromosome- partitioning ATPase Soj	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2699		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
tnpR	tnpR	Transposon Tn3 resolvase	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2697		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2696		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2695		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2694		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2693		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2688		hypothetical protein	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2687		IS6 family transposase IS1216E	0	181	1	5	0.0	2.68817204 30107525	0.0	0.032085561 4973262
group _2735		hypothetical protein	0	180	1	6	0.0	3.22580645 1612903	0.0	0.037433155 0802139
group _2734		hypothetical protein	0	180	1	6	0.0	3.22580645 1612903	0.0	0.037433155 0802139
group _2733		hypothetical protein	0	180	1	6	0.0	3.22580645 1612903	0.0	0.037433155 0802139
group _2732		IS21 family transposase ISLmo7	0	180	1	6	0.0	3.22580645 1612903	0.0	0.037433155 0802139

group_2729		IS3 family transposase ISLmo9	0	180	1	6	0.0	3.225806451612903	0.0	0.0374331550802139
clpE_2	clpE_2	ATP-dependent protease	0	180	1	6	0.0	3.225806451612903	0.0	0.0374331550802139
group_2722		hypothetical protein	0	180	1	6	0.0	3.225806451612903	0.0	0.0374331550802139
group_2721		hypothetical protein	0	180	1	6	0.0	3.225806451612903	0.0	0.0374331550802139
group_2714		ISLre2 family transposase ISAot1	0	180	1	6	0.0	3.225806451612903	0.0	0.0374331550802139
group_2704		hypothetical protein	0	180	1	6	0.0	3.225806451612903	0.0	0.0374331550802139
group_2698		IS3 family transposase ISLmo8	0	180	1	6	0.0	3.225806451612903	0.0	0.0374331550802139
group_2689		hypothetical protein	0	180	1	6	0.0	3.225806451612903	0.0	0.0374331550802139
group_2728		hypothetical protein	0	179	1	7	0.0	3.763440860215054	0.0	0.0427807486631016