

Table S7. Mn- and Fe- transport and regulation related systems in <i>D. deserti</i>						
A. Mn-transport and regulation related systems						
COG number	Protein annotation	Name	<i>D. radiodurans</i> ortholog	<i>D. geothermali</i> ortholog	<i>D. deserti</i> ortholog	Spectral count
COG1108	ABC-type Mn ²⁺ /Zn ²⁺ transport system (permease component)	ZnuB	-	-	Deide_3p02750	0
COG0803	ABC-type Mn/Zn transport system (periplasmic component)	FimA/TroA	DR_2523	Dgeo_0534	Deide_07330	3
COG0803	ABC-type Mn/Zn transport system (periplasmic component)	FimA/TroA	-	-	Deide_3p02720	2
COG0803	ABC-type Mn/Zn transport system (periplasmic component)	FimA/TroA	-	-	Deide_2p01321	0
COG0803	ABC-type Mn/Zn transport system (periplasmic component)	FimA/TroA	-	-	Deide_1p00820	0
COG1108	ABC-type Mn ²⁺ /Zn ²⁺ transport system (permease component)	ZnuB	DR_2283	Dgeo_0532	Deide_07190	0
COG1108	ABC-type Mn ²⁺ /Zn ²⁺ transport system (permease component)	ZnuB	-	-	Deide_3p02740	0
COG1108	ABC-type Mn ²⁺ /Zn ²⁺ transport system (permease component)	ZnuB	-	-	Deide_2p01340	0
COG1108	ABC-type Mn ²⁺ /Zn ²⁺ transport system (permease component)	ZnuB	-	-	Deide_2p01350	0
COG1108	ABC-type Mn ²⁺ /Zn ²⁺ transport system (permease component)	ZnuB	-	-	Deide_3p02750	0
COG1121	ABC-type Mn/Zn transport system (ATPase component)	ZnuC	DR_2284	Dgeo_0533	Deide_07200	0
COG1121	ABC-type Mn/Zn transport system (ATPase component)	ZnuC	-	-	Deide_3p02730	0

COG1121	ABC-type Mn/Zn transport system (ATPase component)	ZnuC	-	-	Deide_2p01330	2
COG1321	Mn-dependent transcriptional regulator	TroR/DtxR	DR_2539	Dgeo_2268	Deide_00680	0
COG1321	Mn-dependent transcriptional regulator	TroR/DtxR	-	-	Deide_3p02021	2
COG1321	Mn-dependent transcriptional regulator	TroR/DtxR	-	-	Deide_3p02751	0
COG1914	NRAMP family transporter	MntH	DR_1709	Dgeo_0709	Deide_3p02300	0
B. Fe-transport and regulation related systems						
COG number	Protein annotation	Name	<i>D. radiodurans</i> ortholog	<i>D. geothermali</i> ortholog	<i>D. deserti</i> ortholog	Spectral count
COG0370	Fe(II) transport system protein B	FeoB	DR_1219	Dgeo_0894	-	-
COG0609	ABC-type Fe(III)-siderophore transport system (permease component)	FepD	DR_2589	Dgeo_0024	Deide_02150	0
COG0609	ABC-type Fe(III)-siderophore transport system (permease component)	FepD	DR_B0015	Dgeo_0125	-	0
COG0609	ABC-type Fe(III)-siderophore transport system (permease component)	FepD	DR_B0122	Dgeo_2758	Deide_2p00390	0
COG0609	ABC-type Fe(III)-siderophore transport system (permease component)	FepD	DR_B0123	Dgeo_2756	Deide_2p00370	0
COG0609	ABC-type Fe(III)-siderophore transport system (permease component)	FepD	DR_C0007	-	-	-
COG0614	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	BtuF	DR_0462	-	-	-

COG0614	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	BtuF	DR_1373	Dgeo_0657	Deide_12970	2
COG0614/COG4594	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	HutB (FhuD-like)/FecB	-	Dgeo_2757	Deide_2p00380	1
COG0614/COG4594	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	HutB (FhuD-like)	-	-	Deide_21930	0
COG0614/COG4594	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	HutB (FhuD-like)	-	Dgeo_2754	-	-
COG0614	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	FhuD	DR_B0125	Dgeo_2753	-	-
COG0614/COG4594	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	FhuD	-	Dgeo_1370	Deide_17140	5
COG0614	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	YvrC	DR_2588	Dgeo_0025	Deide_02140	122
COG0614	ABC-type Fe(III)-hydroxamate transport system (periplasmic component)	YvrC-like	DR_B0007	Dgeo_2363	Deide_2p01550	66
COG0735	Fe(II)/Zn(II) uptake regulation proteins	Fur (Zur)	DR_0865	Dgeo_0519	Deide_16041	0
COG0735	Fe(II)/Zn(II) uptake regulation proteins	Fur	Upstr DR_2342	Dgeo_2141	Deide_19480	0
COG0735	Fe(II)/Zn(II) uptake regulation proteins	Fur	-	Dgeo_2727	Deide_2p00340	0
COG0783	DNA-binding ferritin-like protein (oxidative damage protectant)	Dps	DR_2263	Dgeo_0281	Deide_21200	501
COG0783	DNA-binding ferritin-like protein (oxidative damage protectant)	Dps-like (Dps92)	DR_B0092	-	-	-

COG1120	ABC-type cobalamin/Fe(III)-siderophore transport system (ATPase component)	FepC	DR_2590	Dgeo_0023	Deide_02160	0
COG1120	ABC-type cobalamin/Fe(III)-siderophore transport system (ATPase component)	FepC-like	DR_B0121	Dgeo_2759	Deide_2p00400	0
COG1178	ABC-type Fe ³⁺ transport system (permease component)	ThiP	-	-	Deide_19080	0
COG1178	ABC-type Fe ³⁺ transport system (permease component)	ThiP	DR_2488	Dgeo_1934	Deide_15850	0
COG1840	ABC-type Fe ³⁺ transport system (periplasmic component)	AfuA	-	-	Deide_19090	129
COG1918	Fe(II) transport system protein A	FeoA	DR_1220	Dgeo_0895	-	-
COG2375	siderophore -interacting protein	ViuB	DR_B0017	Dgeo_0127	-	-
COG2375	siderophore -interacting protein	ViuB-like	DR_B0124	-	-	-
COG4264	Siderophore synthetase component	RhbC	-	-	Deide_21890	1
COG4264	Siderophore synthetase component	RhbC	-	-	Deide_21910	0
COG4559	ABC-type hemin transport system (ATPase component)	HmuV	DR_B0016	Dgeo_0126	-	-