

Additional file 6**Putative restriction endonucleases in the genome of *Microcystis aeruginosa* PCC 7806**

Gene ID	COG number	Function
mic0099	COG3440	Predicted restriction endonuclease
mic0856	COG1715	Restriction endonuclease (Mrr restriction system protein)
mic1049	COG1403	Restriction endonuclease HNH superfamily
mic1233		Type II restriction enzyme (probable endonuclease <i>HindVP</i>)
mic1522	COG1403	Restriction endonuclease HNH superfamily
mic1606		Restriction endonuclease (possible <i>MspAII</i>)
mic1612		Restriction endonuclease (possible endonuclease <i>MspAII</i>)
mic2809		Type II site-specific deoxyribonuclease (possible endonuclease <i>AvaI</i>)
mic3268	COG4096	Type I/III site-specific restriction-modification system; restriction subunit and related helicase
mic3271	COG0732	Type I Restriction endonuclease; HsdS subunit
mic3701	COG4096	Type I/III site-specific restriction-modification system; restriction subunit and related helicase
mic3705	COG0732	Type I Restriction endonuclease; HsdS subunit
mic3707		Type I restriction enzyme M protein
mic3969	COG0732	Type I site-specific deoxyribonuclease
mic3993		Type III Restriction endonuclease; restriction subunit
mic4233		Type I restriction enzyme; HsdR restriction subunit
mic4262		Type II restriction endonuclease (possible endonuclease <i>EcoRV</i>)
mic4389		Type II restriction endonuclease
mic4421	COG1403	Restriction endonuclease HNH superfamily
mic5299		Type II restriction enzyme (probable endonuclease <i>NspV</i>)
mic6570		Type I Restriction endonuclease; HsdS subunit

Enzymes shown in bold are co-localized with putative methylases shown in the table of additional file 7.