

Table S1. Genes that are differentially expressed in $\Delta adv-1$ germlings and $\Delta adv-1$ hyphae compared to wild-type.

Gene ID	Annotation	Gene Name	Circos Group
NCU02767	Hyphal anastomosis-6 protein	<i>ham-6</i>	communication
NCU02811	hyphal anastomosis-8 protein	<i>ham-8</i>	communication
NCU04487	hypothetical protein		communication
NCU04645	DUF124 domain-containing protein		communication
NCU04732	Hyphal anastomosis-11 protein	<i>ham-11</i>	communication
NCU07192	determinant of communication 2	<i>doc-2</i>	communication
NCU05822	hypothetical protein		signaling
NCU02246	hypothetical protein		adhesion
NCU03132	hypothetical protein		adhesion
NCU05137	non-anchored cell wall protein 1		fungal cell wall remodeling
NCU09307	late fusion defect 1	<i>lfd-1</i>	fusion
NCU09337	plasma membrane fusion protein prm-1	<i>prm-1</i>	fusion
NCU05712	hypothetical protein		heterokaryon incompatibility
NCU01958	mating-type protein A-1	<i>mat A-1</i>	NA (heterokaryon incompatibility/development)
NCU03600	guanine triphosphate binding-5	<i>esd-C</i>	development
NCU02988	hypothetical protein		metabolism
NCU05126	hypothetical protein		metabolism
NCU05132	hypothetical protein		metabolism
NCU05835	hypothetical protein		metabolism
NCU04997	xylanase		plant cell wall degradation
NCU04496	hypothetical protein		redox
NCU08839	hypothetical protein		DNA
NCU03035	hypothetical protein		hypothetical
NCU09356	hypothetical protein		hypothetical
NCU12021	hypothetical protein		hypothetical
NCU00995	hypothetical protein		hypothetical with signal peptide
NCU04169	hypothetical protein		hypothetical with signal peptide
NCU09848	hypothetical protein		hypothetical with signal peptide
NCU04542	hypothetical protein		hypothetical, signal peptide, transmembrane domain
NCU05915	hypothetical protein		hypothetical, signal peptide, transmembrane domain
NCU07798	hypothetical protein		hypothetical with transmembrane domain
NCU07802	hypothetical protein		hypothetical with transmembrane domain
NCU07804	hypothetical protein		hypothetical with transmembrane domain
NCU11172	hypothetical protein		hypothetical with transmembrane domain
NCU12067	hypothetical protein		hypothetical with transmembrane domain
NCU12068	hypothetical protein		hypothetical with transmembrane domain
NCU00994	endothiapepsin		NA
NCU01066	L-amino acid oxidase		NA
NCU06467	hypothetical protein		NA