

Table S4 Differentially regulated genes in Δ nox1 protoperithecia compared to wild type protoperithecia with an impact on sexual development in *N. crassa*

<i>S. macrospora</i> locus tag	<i>N. crassa</i> locus tag	Gene designation	Gene product	Phenotype of <i>N. crassa</i> deletion mutant
upregulated in Δ nox1 protoperithecia compared to wild type protoperithecia				
SMAC_00047	NCU_08726	<i>fl</i>	transcription factor fluffy	sterile ^a
SMAC_00190	NCU00911	<i>cps1</i>	Polysaccharide synthase Cps1p	sterile, reduced growth ^a
SMAC_00609	NCU02833	<i>ham-10</i>	Hyphal anastomosis-10	sterile, reduced growth, cell fusion deficient ^b
SMAC_02227	NCU00202	<i>crn</i>	Coronin-1	sterile, reduced growth, no polarity during germination ^c
SMAC_02283	NCU00138	<i>pre-1</i>	Pheromone receptor-1	female sterile ^d
SMAC_02450	NCU01765	<i>nuo78</i>	NADH:ubiquinone oxidoreductase 78	Reduced perithecia formation, no ascospore production ^e
SMAC_04395	NCU04198	<i>cac-1</i>	Chromatin assembly-1	Sterile, reduced growth ^a
SMAC_05401	NCU01958	<i>matA-1</i>	Mating type protein A-1	sterile, heterokaryon compatible ^f
SMAC_05403	NCU01960	<i>matA-3</i>	Mating type protein A-3	few ascospores formed ^g
SMAC_05824	NCU02534	<i>nuo49</i>	NADH:ubiquinone oxidoreductase 49	Sterile, reduced growth ^e
SMAC_06177	NCU04001	<i>ff-7</i>	Transcription factor female fertility-7	sterile ^a
SMAC_06684	NCU00272	<i>cul-4</i>	Cullin-4	sterile, reduced growth ^a
SMAC_07314	NCU07622		Putative GTPase activating protein	sterile ^a
SMAC_08994	NCU05758	<i>pre-2</i>	Pheromone receptor-2	sterile, no ascospore formation ^a
downregulated in Δ nox1 protoperithecia compared to wild type protoperithecia				
SMAC_00010	NCU10142		Putative heterokaryon incompatibility protein	sterile ^a
SMAC_00177	NCU09211	<i>sad-3</i>	Suppressor of ascus dominance-3	no ascospore production ^h
SMAC_01666	NCU09915	<i>fsd-1</i>	Female sexual development-1	sterile, defect in ascospore

SMAC_02093	NCU07816		Putative magnesium and cobalt transporter CorA	maturation ^a sterile ^a
SMAC_02094	NCU07817	<i>ncw-3</i>	Non-anchored cell wall protein-3	sterile, reduced growth ^a
SMAC_06479	NCU00340	<i>pp-1</i>	protoperithecium-1	sterile, reduced growth, ascospore germination defect ⁱ
SMAC_07309	NCU07617	<i>acon-3</i>	Aconidiate-3	sterile ^a
SMAC_07994	NCU08227		Putative glycosyl hydrolase	sterile ^a
SMAC_08793	NCU08739		endothiaepsin	sterile, reduced growth ^a
SMAC_12613	NCU07172	<i>stk-8</i>	Serine/threonine protein kinase-8	sterile, reduced growth, defective in conidia development ^j

^a*Neurospora crassa* Sequencing Project, Broad Institute of Harvard and MIT (<http://www.broadinstitute.org/>); ^b(Fu *et al.* 2011); ^c(Echauri-Espinosa *et al.* 2012); ^d(Kim and Borkovich 2004); ^e(Tanida 2011); ^f(Glass and Lee 1992); ^g(Ferreira *et al.* 1998); ^h(Hammond *et al.* 2012); ⁱ(Li *et al.* 2005); ^j(Park *et al.* 2011)