

Table S1. Summary of response to spore formation inducers

	Strains	Response to GABA	Response to SDF-2	Response to cytokinin	Reference for strains
Cytokinin mutants	acrA ⁻ /K	Yes	Yes	No	Soderbom et al., 1999
	dhkB ⁻ /K	Yes	Yes	No	This publication
	iptA ⁻	Yes	Yes	Yes	This publication
GABA mutants	gadA ⁻	Yes	Yes	Yes	Anjard and Loomis, 2006
	grlE ⁻	No	Yes	Yes	Anjard and Loomis, 2006
	PKBR1 ⁻	No	Yes	Yes	Meili et al., 2000
	PI3K1 ⁻ ,2 ⁻	No	Yes	Yes	Buczynski et al., 1997
SDF-2 mutants	acbA ⁻	Yes	Yes	Yes	Anjard and Loomis, 2005
	dhkA ⁻ /K	No	No	Yes	Anjard et al., 1998a
	rdeA ⁻ /K	No	No	Yes	This publication
	regA ⁻	No	No	Yes	Shaulsky et al., 1996
Other mutants	Ax4 pspA::Rm	No	No	No	Hopper et al., 1995
	acaA ⁻ /K	Yes	Yes	Yes	Anjard et al., 2001
	acgA ⁻	Yes	Yes	Yes	Van Es et al., 1996
	dokA ⁻	Yes	Yes	Yes	Schuster et al., 1996
	grlA ⁻	Yes	Yes	Yes	Prabhu et al., 2007a
	grlJ ⁻	Yes	Yes	Yes	Pradhu et al., 2007b

Additional References

- Buczynski, G., Grove, B., Nomura, A., Kleve, M., Bush, J., Firtel, R. A. and Cardelli, J.** (1997). Inactivation of two *Dictyostelium discoideum* genes, DdPIK1 and DdPIK2, encoding proteins related to mammalian phosphatidylinositol 3-kinases, results in defects in endocytosis, lysosome to post-lysosome transport, and actin cytoskeleton organization. *J. Cell Biol.* **136**, 1271-1286.
- Hopper, N. A., Sanders, G. M., Fosnaugh, K. L., Williams, J. G. and Loomis, W. F.** (1995). Protein kinase A is a positive regulator of spore coat gene transcription in *Dictyostelium*. *Differentiation* **58**, 183-188.
- Meili, R., Ellsworth, C. and Firtel, R. A.** (2000). A novel Akt/PKB-related kinase is essential for morphogenesis in *Dictyostelium*. *Curr. Biol.* **10**, 708-717.
- Prabhu, Y., Mondal, S., Eichinger, L. and Noegel, A.** (2007a). A GPCR involved in post aggregation events in *Dictyostelium discoideum*. *Dev Biol.* (in press).
- Prabhu, Y., Müller, R., Anjard, C. and Noegel, A.** (2007b). GrlJ, a *Dictyostelium* GABAB-like receptor with roles in post-aggregation development. *BMC Dev Biol.* **7**, 44.
- Schuster, S., Noegel, A., Oehme, F., Gerisch, G. and Simon, M.** (1996). The hybrid histidine kinase DokA is part of the osmotic response system of *Dictyostelium*. *EMBO J.* **15**, 3880-3889.
- Shaulsky, G., Escalante, R. and Loomis, W. F.** (1996). Developmental signal transduction pathways uncovered by genetic suppressors. *Proc. Natl. Acad. Sci. USA* **93**, 15260-15265.