

**Table S3.** Spore viabilities in WT and *pch2Δ* strains carrying *spo11* hypomorphic mutations.

<i>SPO11</i> Genotype	<i>PCH2</i> Genotype	Temp. (°C)	4:0	3:1	2:2	1:3	0:4	Total	Viability (%)
<i>Wild-type</i>	<i>Wild-type</i>	30	880	43	10	2	0	935	98.2
<i>HA/HA</i>	<i>Wild-type</i>	30	77	14	7	2	0	100	91.5
<i>yf-HA/HA</i>	<i>Wild-type</i>	30	80	9	2	8	1	100	89.8
<i>da-HA/da-HA</i>	<i>Wild-type</i>	30	58	3	10	0	29	100	65.3
<i>Wild-type</i>	<i>Δpch2</i>	30	862	64	15	0	0	941	97.5
<i>HA/HA</i>	<i>Δpch2</i>	30	74	13	6	7	0	100	88.5
<i>yf-HA/HA</i>	<i>Δpch2</i>	30	18	2	6	2	72	100	23.0
<i>da-HA/da-HA</i>	<i>Δpch2</i>	30	8	11	19	5	57	100	27.0
<i>Wild-type</i>	<i>Wild-type</i>	33	1207	208	41	5	0	1461	82.6
<i>HA/HA</i>	<i>Wild-type</i>	33	85	4	10	1	0	100	93.0
<i>yf-HA/HA</i>	<i>Wild-type</i>	33	64	12	11	0	10	97	80.0
<i>da-HA/da-HA</i>	<i>Wild-type</i>	33	50	11	14	7	18	100	67.0
<i>Wild-type</i>	<i>Δpch2</i>	33	1279	203	39	2	0	1523	84.0
<i>HA/HA</i>	<i>Δpch2</i>	33	84	3	12	1	0	100	92.5
<i>yf-HA/HA</i>	<i>Δpch2</i>	33	75	4	18	2	1	100	87.5
<i>da-HA/da-HA</i>	<i>Δpch2</i>	33	33	20	18	14	5	90	67.0

Spore viability pattern, live:dead (no. tetrads)