

Table 1

## Stages of SCV biogenesis

SCV stage	Characteristics	Host cell markers	T3SS effectors implicated	References
Early (<30 min)	Simple vacuole or spacious phagosome	EEA1, rab5a, rab5b, rab5c, transferrin receptor	T3SS1: SipA, SopA, SopB, SpiC/SsaB T3SS2: SpiC	[7,27*,38,57*]
Intermediate (30 min to 5 hours)	Vacuole primarily in juxtannuclear position	Lamps, vATPase, rab7, rab11a, rab11b	T3SS1: SopB, SipA T3SS2: SSeF, SseG, SpiC/SsaB, SteC, SseJ/SifC	[7,27*,57*]
Late (>5 hours)	Initiation of intracellular replication and formation of tubules (Sifs) radiating throughout cells. Microtubule and actin accumulation around juxtannuclear SCV	Lamps, vATPase, rab7, rab9	T3SS2: PipB2, SifA, SopD2, SpiC/SsaB, SseF, SseG, SseJ/SifC, SteC	[20,27*,42,48,53,57*]

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