S5 Table. LC-MS analysis of soy medium culture supernatants from wt *S. clavuligerus* and *Δcpe-INF* mutant strains for detecting 5*S* clavam production.

Strain (plasmid)[a]	Metabolite[b,c]		
	2-Hydroxymethyl clavam (m/z=144/212)	Clavam- 2-carboxylate (m/z=158/226)	Clavulanic acid (m/z=156/224)
wt	+	+	+
Δcpe-INF	+	+	-
Δcpe-INF **(pSET:*cpe*^{Sc})**	+	+	+
Δcpe-INF **(pHM:*cpe*^{Ct})**	+	+	-

[a] Select strains were fermented for 96 hours and culture supernatants were subjected to LC-MS analysis after imidazole derivatization.

[b] Metabolites and respective *m/z* values of corresponding imidazole derivatives/fragmentation products/ions are indicated, where (+ and -) indicate that ions corresponding to the metabolite were either present or was not detected in culture supernatants, respectively.

[c] The presence of 2-hydroxymethyl clavam and clavam-2-carboxylate was used to monitor 5*S* clavam production since the metabolites produced as part of a common biosynthetic pathway in *S. clavuligerus*.