

Distribution of reverse-engineered reactions from *S. aureus* iSB619 model

Reactions to Reverse Engineer	Total Number of Reactions ^a		427
			Reaction Counts
	Reactions Added “As is” ^b		33
	Reactions Mapped to Functional Roles	Exact match to KEGG reaction	365
Inexact match to KEGG reaction ^c		29	

^{a.} Reaction total does not include transport and exchange reactions, and “dead end” reactions (*i.e.*, reactions whose substrates are never produced or whose products are never consumed) specified by the published model.

^{b.} Reactions in *iSB619* model that combine many reactions into one for synthesis of *S. aureus* specific properties (*e.g.*, fatty acid synthesis).

^{c.} Reactions in the model that differ slightly from the KEGG reaction database (*e.g.*, cofactor usage).