

Supporting Table 1. Colony counts for the Level 2 assembly reagents.

	Buffer-ligase combinations					
	T4 DNA Ligase Buffer- T4 DNA ligase	T4 DNA Ligase Buffer- T7 DNA ligase	2xTango Buffer- T4 DNA ligase	2xTango Buffer- T7 DNA ligase	Aarl Buffer- T4 DNA ligase	Aarl Buffer- T7 DNA ligase
Replicate 1						
# blue colonies	159	46	7	3	46	4
# yellow colonies	31	12	49	13	4	3
# white colonies	0	1	0	0	0	0
Replicate 2						
# blue colonies	484	86	5	8	124	10
# yellow colonies	117	15	124	75	43	18
# white colonies	8	3	2	1	9	4
Replicate 3						
# blue colonies	298	162	21	16	54	21
# yellow colonies	90	40	167	268	372	192
# white colonies	8	13	4	3	2	3