

Plate D anchovy oil score																		
	1	2	3	4	5	6	7	8	9	10	11	12						
A	2	2	2	2	2	2	2	2	1	2	2	3	A	1	1	2	0	1
B								2	2	1	1	0	B	1	1	2	2	
C													C	1	2	1	2	
D													D	2	2	2	2	
E													E	1	2	1	2	
F													F					
G													G					
H													H					
Plate D coconut oil score																		
	1	2	3	4	5	6	7	8	9	10	11	12						
A	2	2	2	2	2	2	2	2	3	2	2	2	A	1	2	0	2	
B								2	2	0	2	1	B	1	1	2	2	
C													C	1	2	1	2	
D													D	2	2	2	2	
E													E	1	2	1	1	
F													F					
G													G					
H													H					
Plate D difference in score																		
	1	2	3	4	5	6	7	8	9	10	11	12						
A	0	0	0	0	0	0	0	0	2	0	0	-1	A	0	1	0	1	
B	0	0	0	0	0	0	0	0	0	-1	1	1	B	0	0	0	0	
C													C	0	0	0	0	
D													D	0	0	0	0	
E													E	0	0	0	-1	
F													F	0	0	0	0	
G													G					
H													H					

Table S2: Activity of GTL mutants on anchovy and coconut oil.

Mutants showing improved difference in activity (>2) are sequenced and the mutations were identified.