

Supplementary information

Supplementary Table 1: Building oligonucleotides

Strand	Segment 1	Segment 2
y1h	5'/Phos/CGTT	TGG ATC CGC ATG ACA TTC GCC GTA AG-3'
y1d	5'/Phos/ATGC	
y1Alex488	5'/Alex488/	
y2D	5'/Phos/GCAT	CTT ACG GCG AAT GAC CGA ATC AGC CT-3'
y2e	5'/Phos/GCAA	
y2Alex488	5'/Alex488/	
y2BO630	5'/BO630/	
y3D	5'/Phos/GCAT	AGG CTG ATT CGG TTC ATG CGG ATC CA-3'
y3E	5'/Phos/TTGC	
y3H	5'/Phos/AACG	
y3BO630	5'/BO630/	

Notes: (1) 5'/Phos/ indicates 5' Phosphorylation modification

(2) 5'/Alex488/ indicates 5' Alexa Fluor® 488 NHS Ester modification

(3) 5'/BO630/ indicates 5' Bodipy® 630/650-X NHS Ester modification