

Supplementary Information

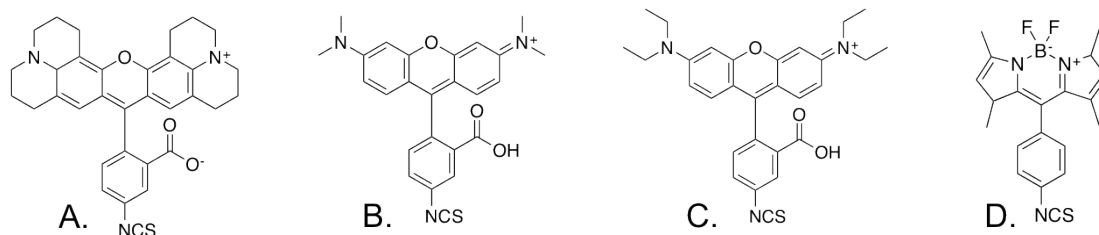


Figure S1. Structures of the isothiocyanate dyes used as the reporter molecule in the multiplex. A) substituted rhodamine isothiocyanate (XRITC) B) tetramethylrhodamine isothiocyanate (TRITC) C) rhodamine B isothiocyanate D) boron-dipyrromethene isothiocyanate (BODIPY-ITC)

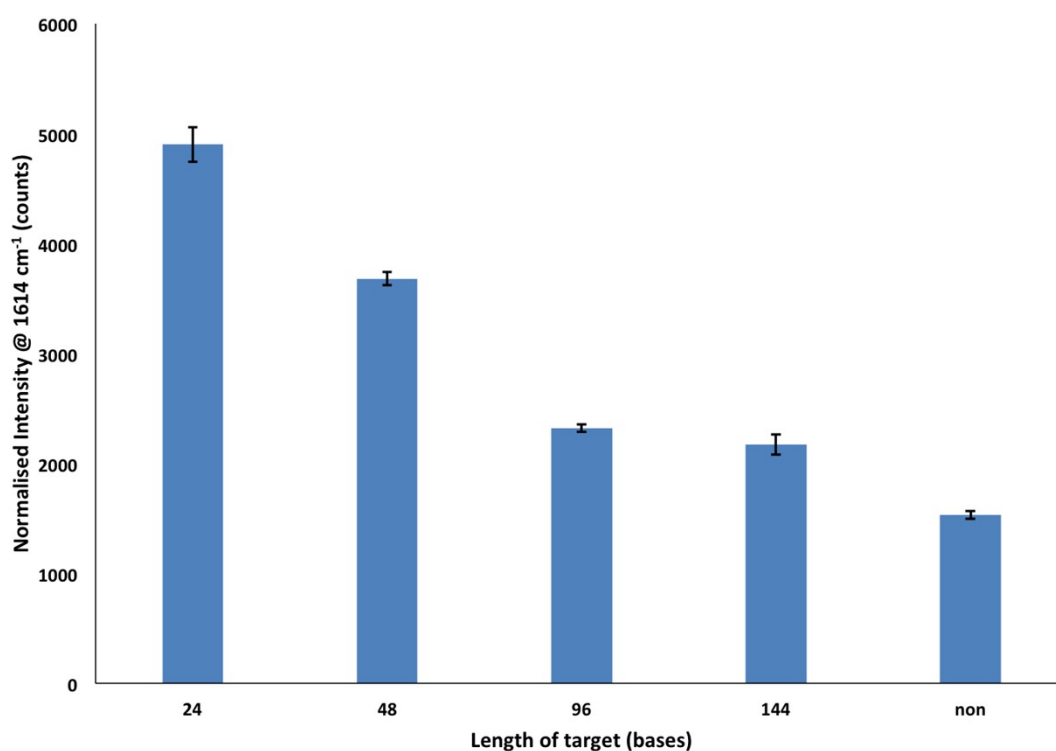


Figure S2. Plot showing how SERS signal decreases as the length of the target increases, emphasising the limited hybridisation of the 12 base probes to larger single stranded sequences

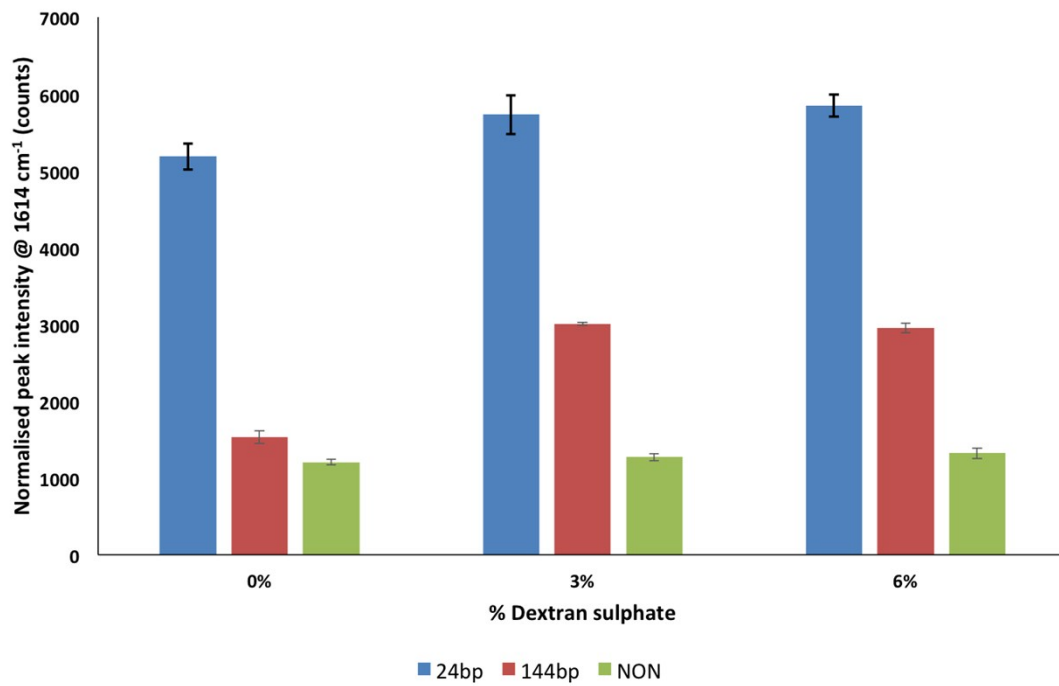


Figure S3. By increasing the w/v of dextran sulphate in the hybridisation it can be seen that hybridisation of the 12 base probes to the 24 and 144 base synthetic complements becomes much greater.