

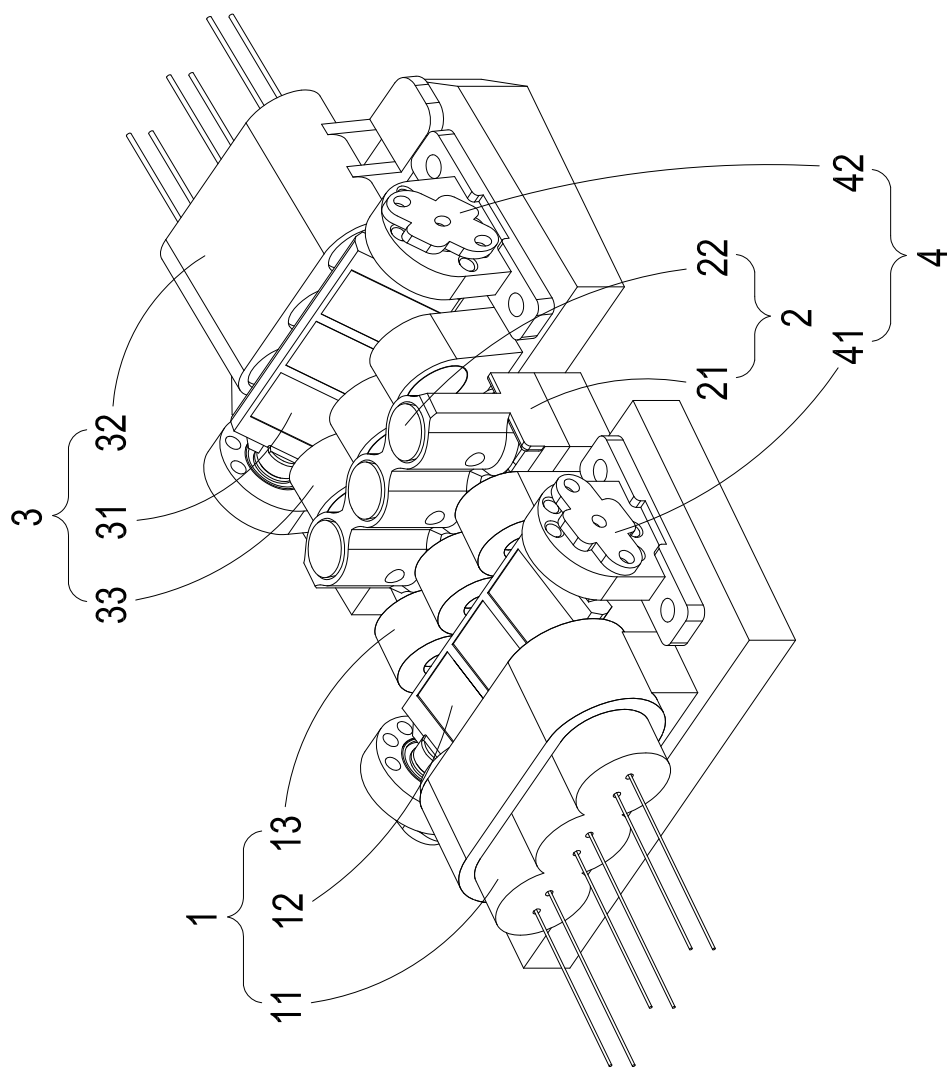


FIG. 1

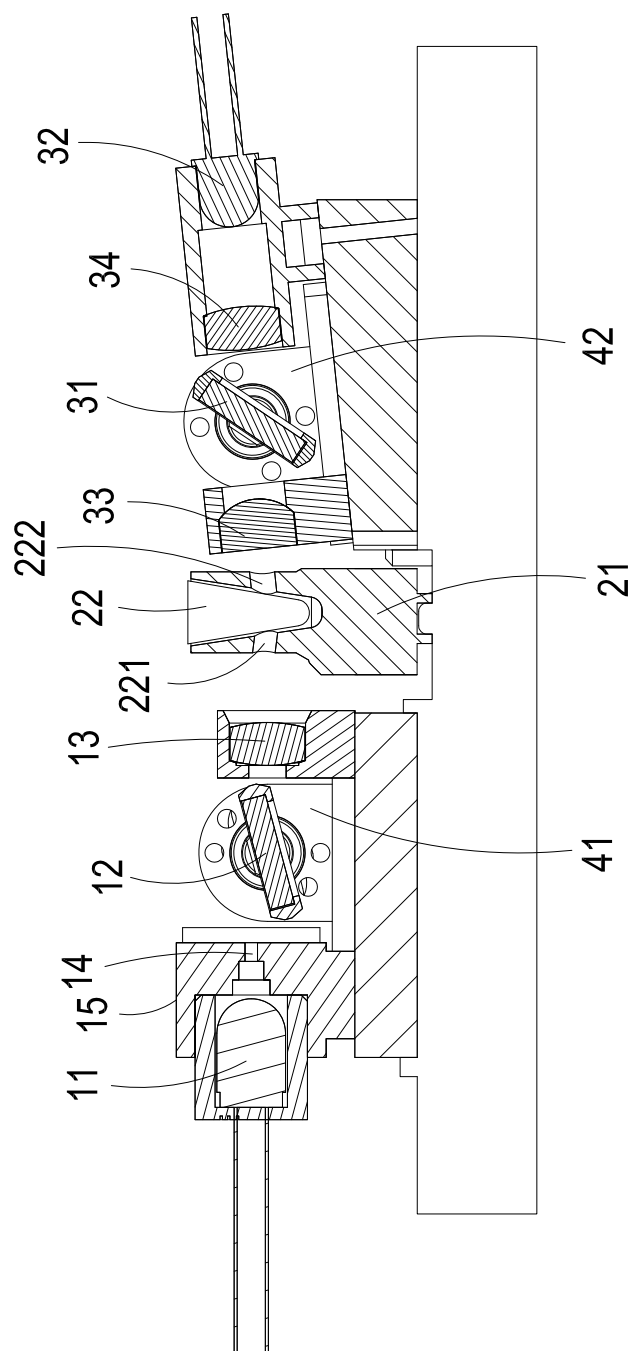


FIG. 2

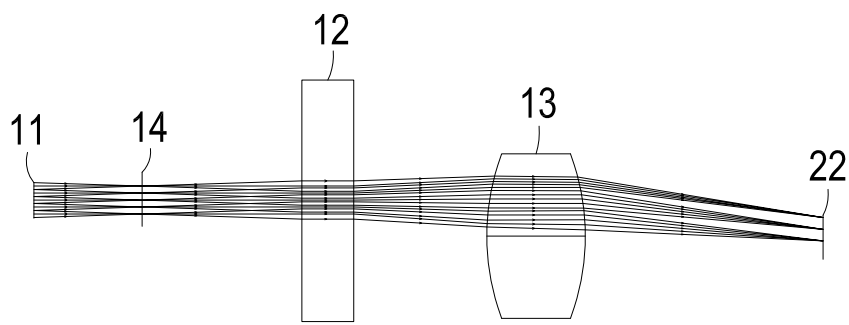


FIG. 3A

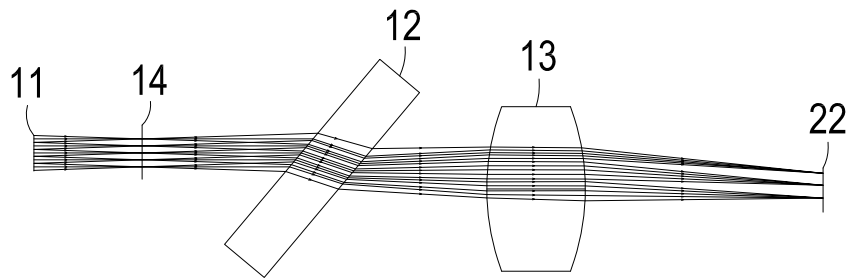


FIG. 3B

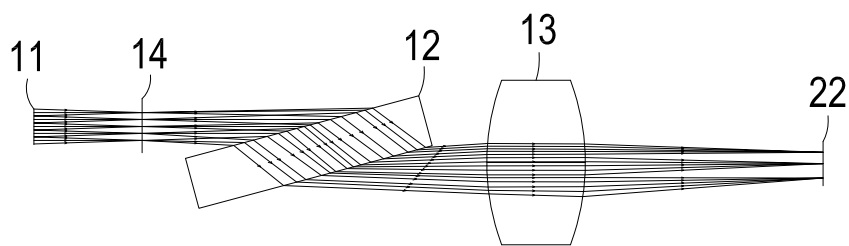


FIG. 3C

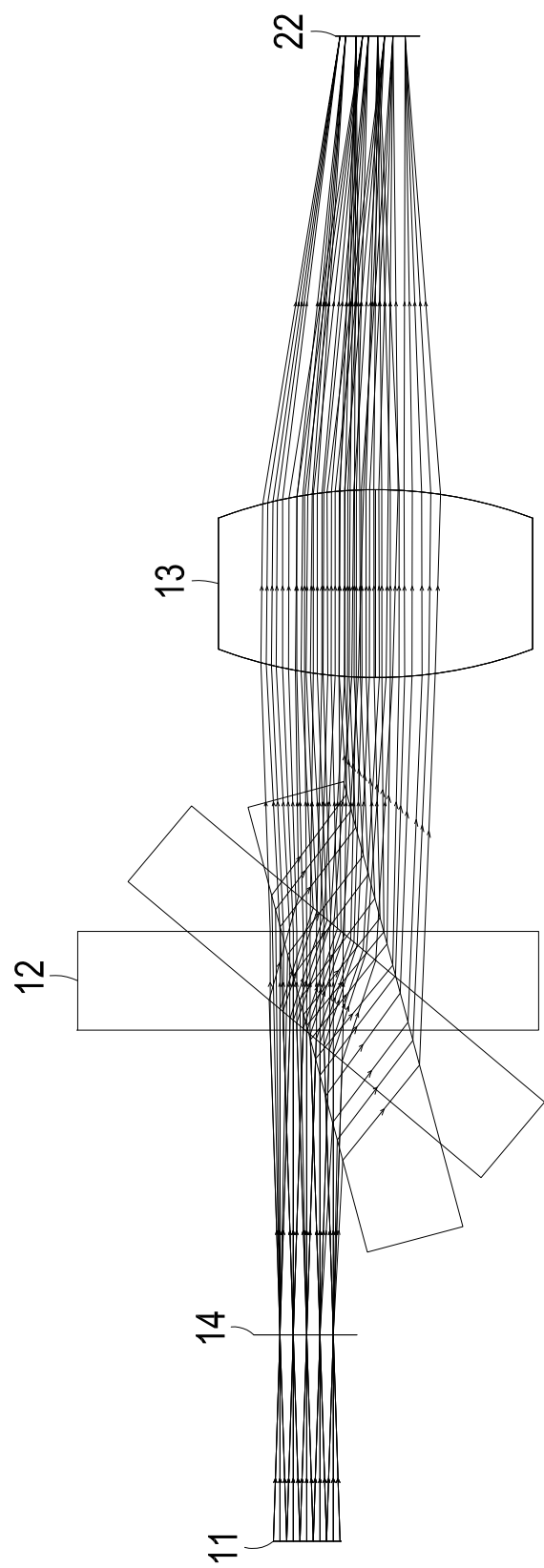


FIG. 4

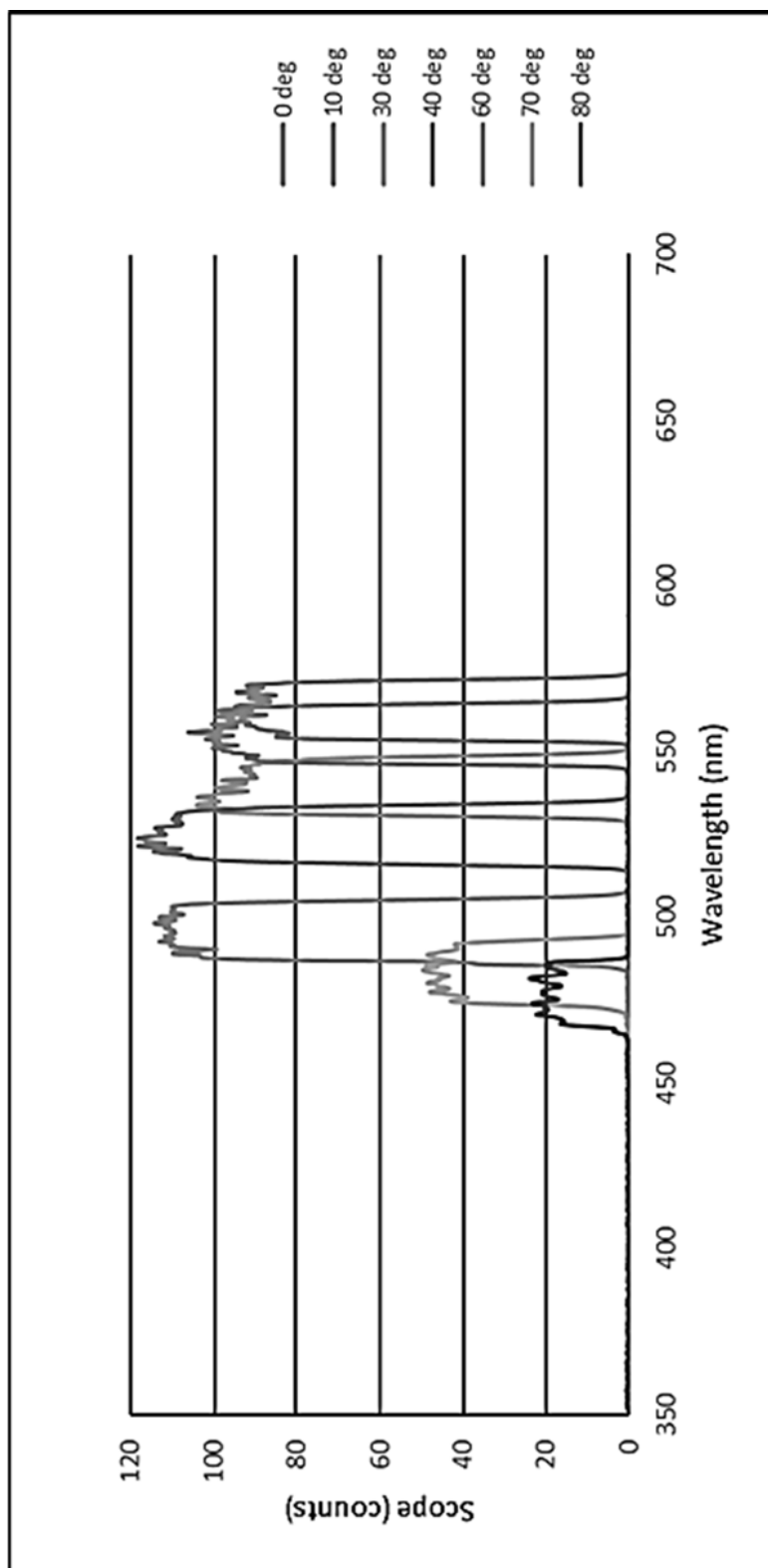


FIG. 5

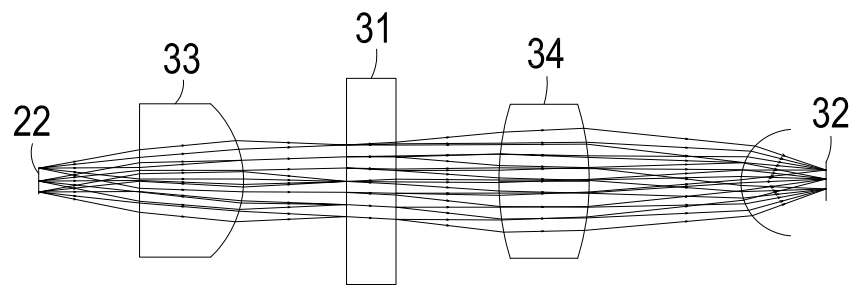


FIG. 6A

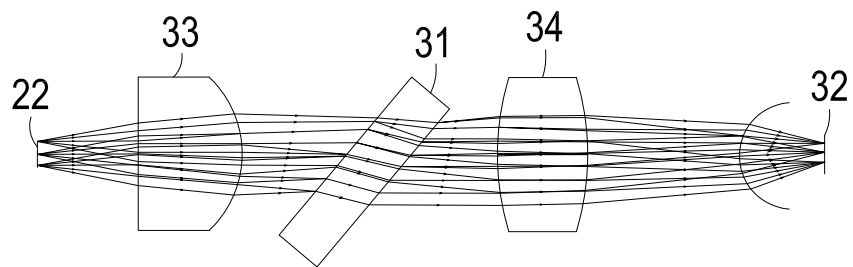


FIG. 6B

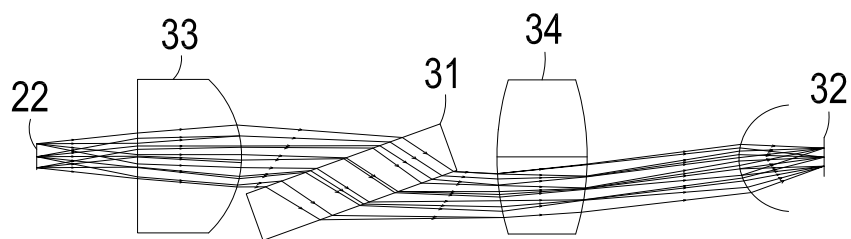


FIG. 6C

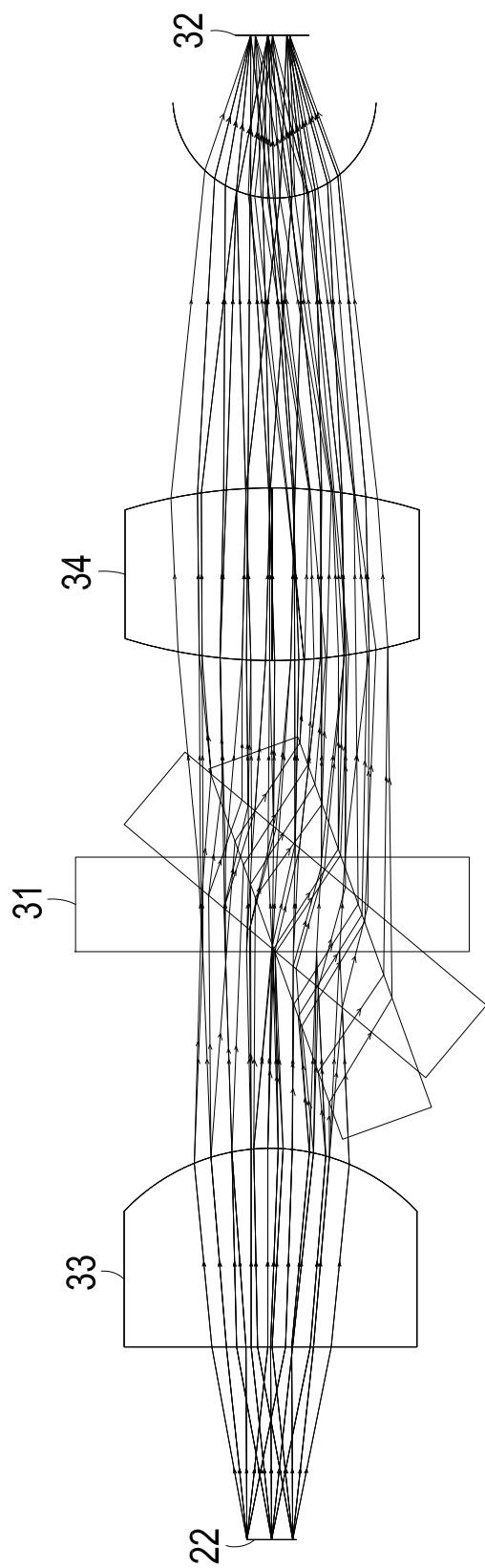


FIG. 7

Quencher & Dye Selection Guide

Dye Name	Excitation Max, nm	Emission Max, nm	Color
Alexa 350	346	442	Blue
Pacific Blue	416	451	
Marina Blue	362	459	Blue-Green
Acridine	362	462	
Edans	336	468	Green
Coumarin	432	472	
BODIPY 493/503	493	503	
Cy2	489	506	
BODIPY FL-X	504	510	Yellow-Green
DANSYL	335	518	
Alexa 488	495	519	
FAM	495	520	
Oregon Green	500	520	
Rhodamine Green-X	503	528	
NBD-X	466	535	
TET	521	536	
Alexa 430	434	541	
BODIPY R6G-X	529	547	
JOE	520	548	Yellow
Yakima Yellow	531	549	
Alexa 532	532	554	
VIC	538	554	
HEX	535	556	
R6G	524	557	
Alexa 555	555	565	

Alexa 555	555	565	Yellow-Orange
BODIPY 564/570	563	569	
BODIPY TMR-X	544	570	
Cy3	550	570	
Alexa 546	556	573	
TAMRA	555	576	
Rhodamine Red-X	560	580	
BODIPY 581/591	581	591	
Redmond Red	579	595	
Cy3.5	581	596	
ROX	575	602	Orange
Alexa 568	578	603	
Cal Red	583	603	Orange-Red
BODIPY TR-X	588	616	
Alexa 594	590	617	

FIG. 8

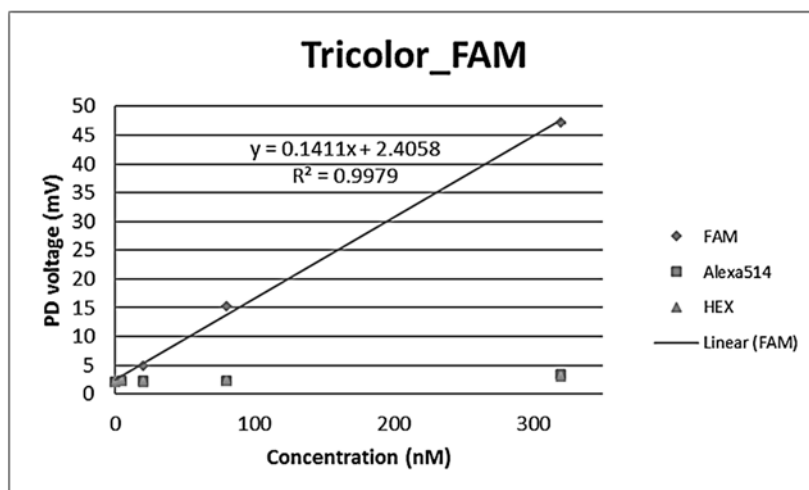


FIG. 9A

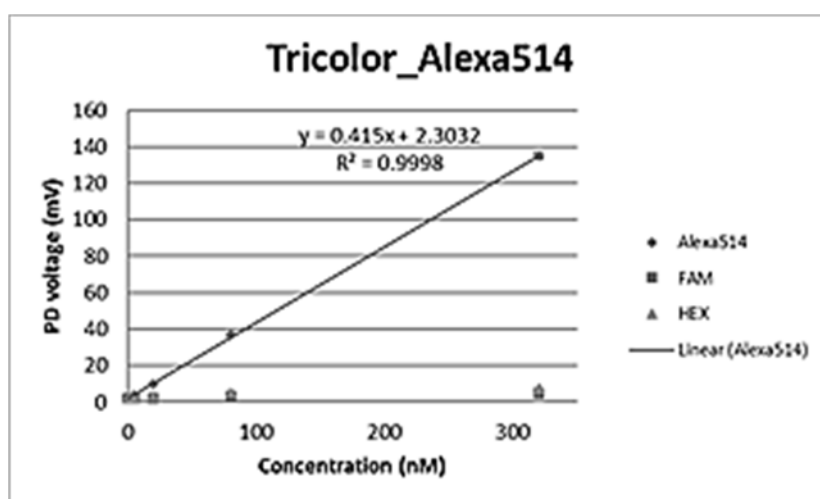


FIG. 9B

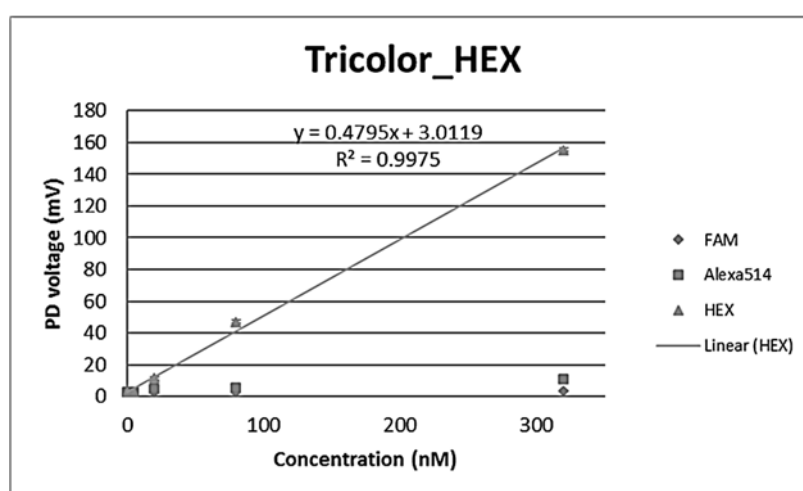


FIG. 9C

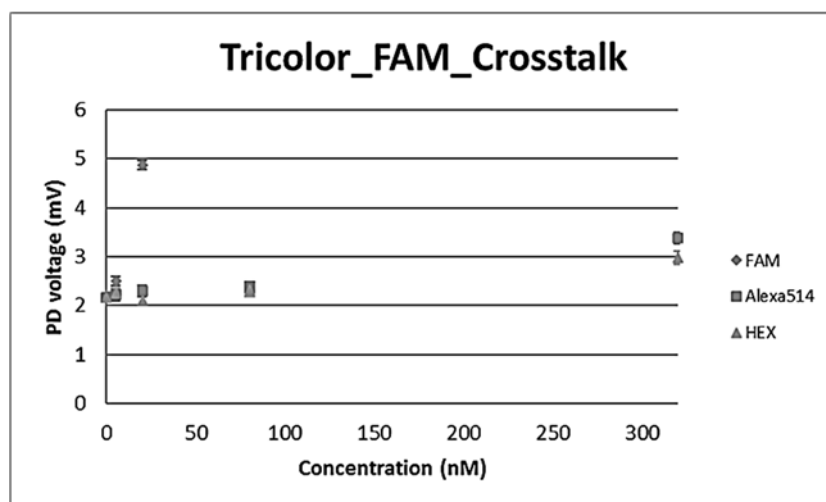


FIG. 10A

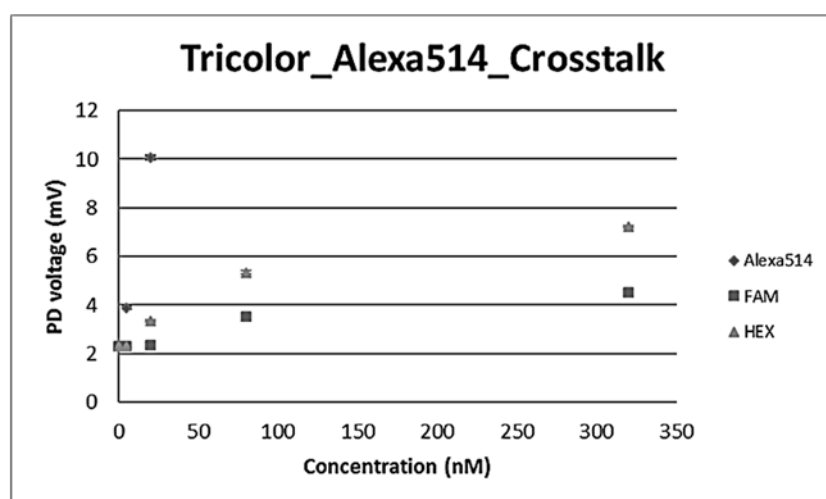


FIG. 10B

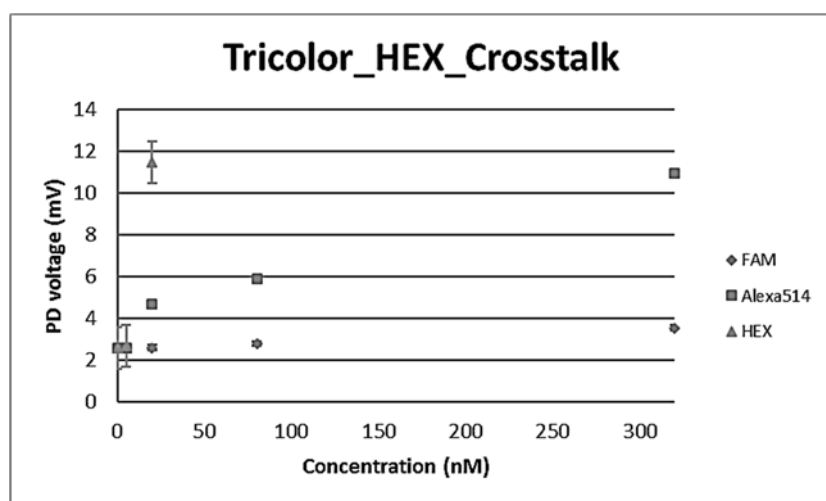


FIG. 10C