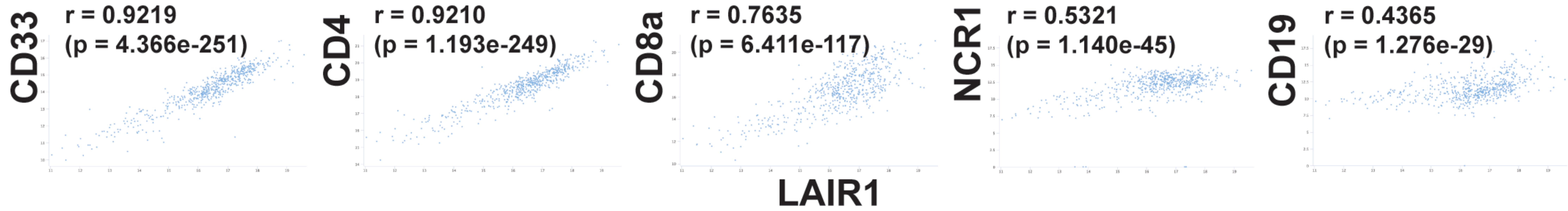


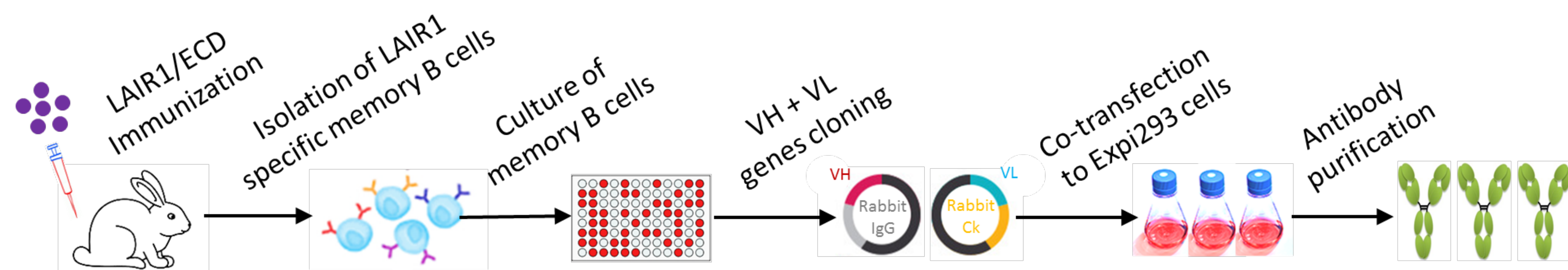
Supplementary Fig 1

Kidney Clear Cell Carcinoma (n = 985) from GDC TCGA

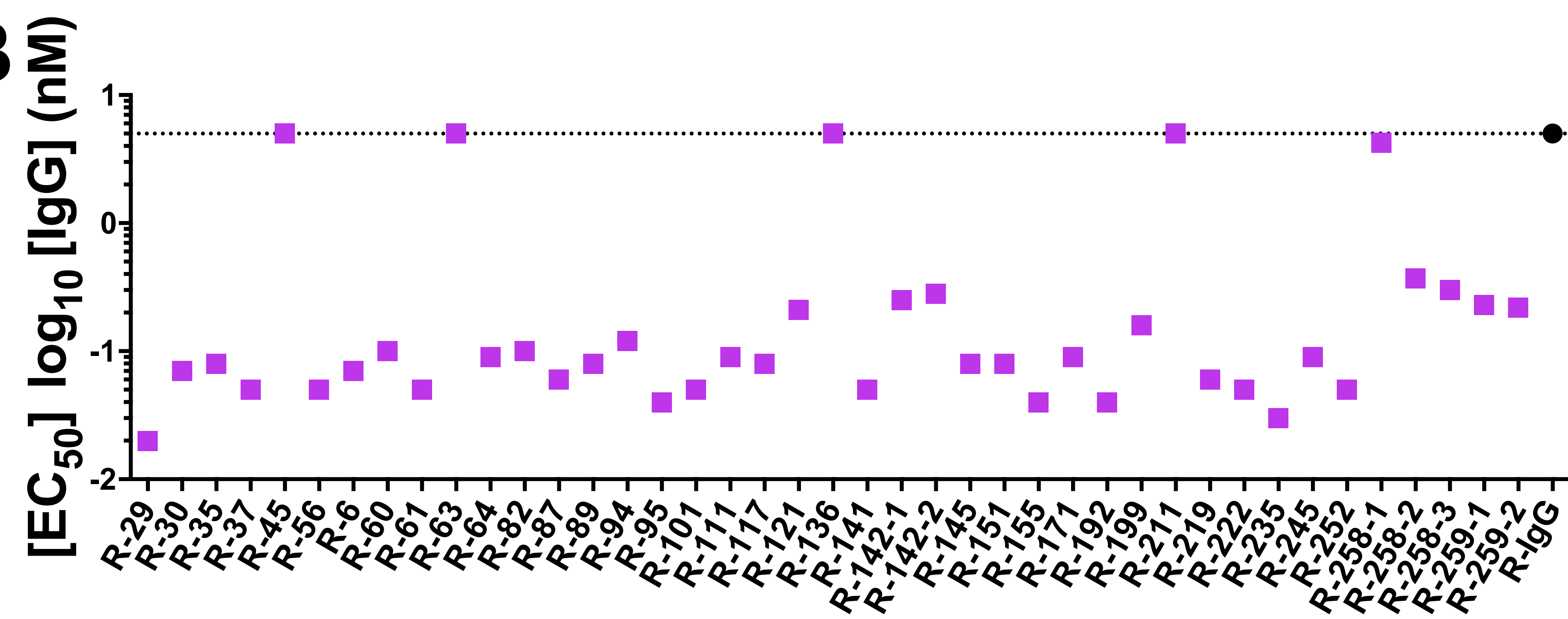


Supplementary Fig 2

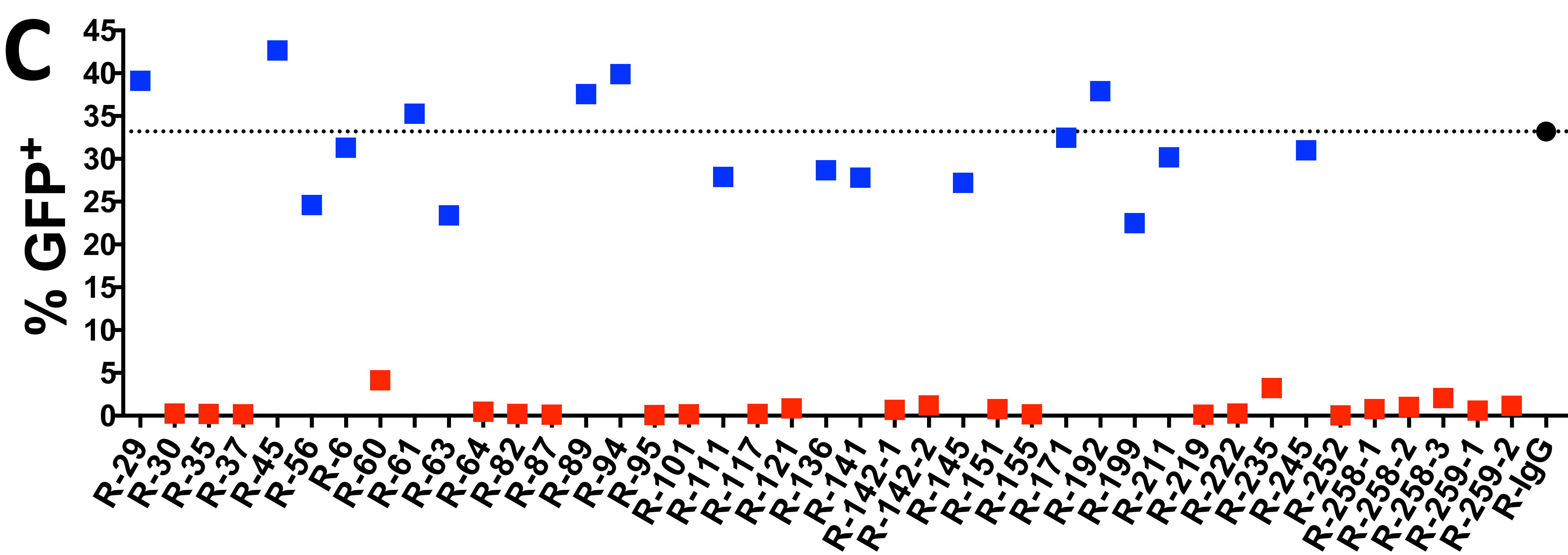
A



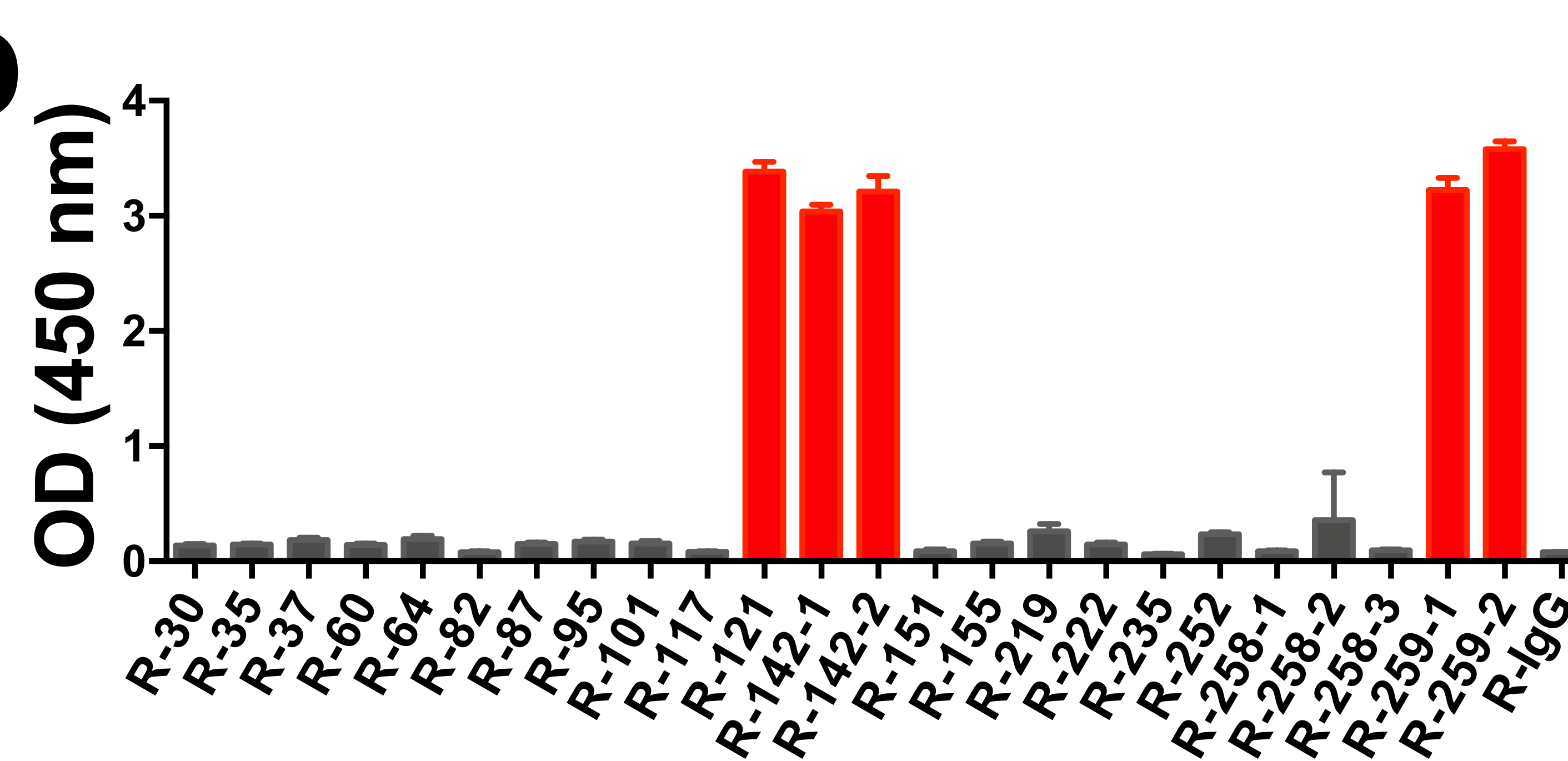
B



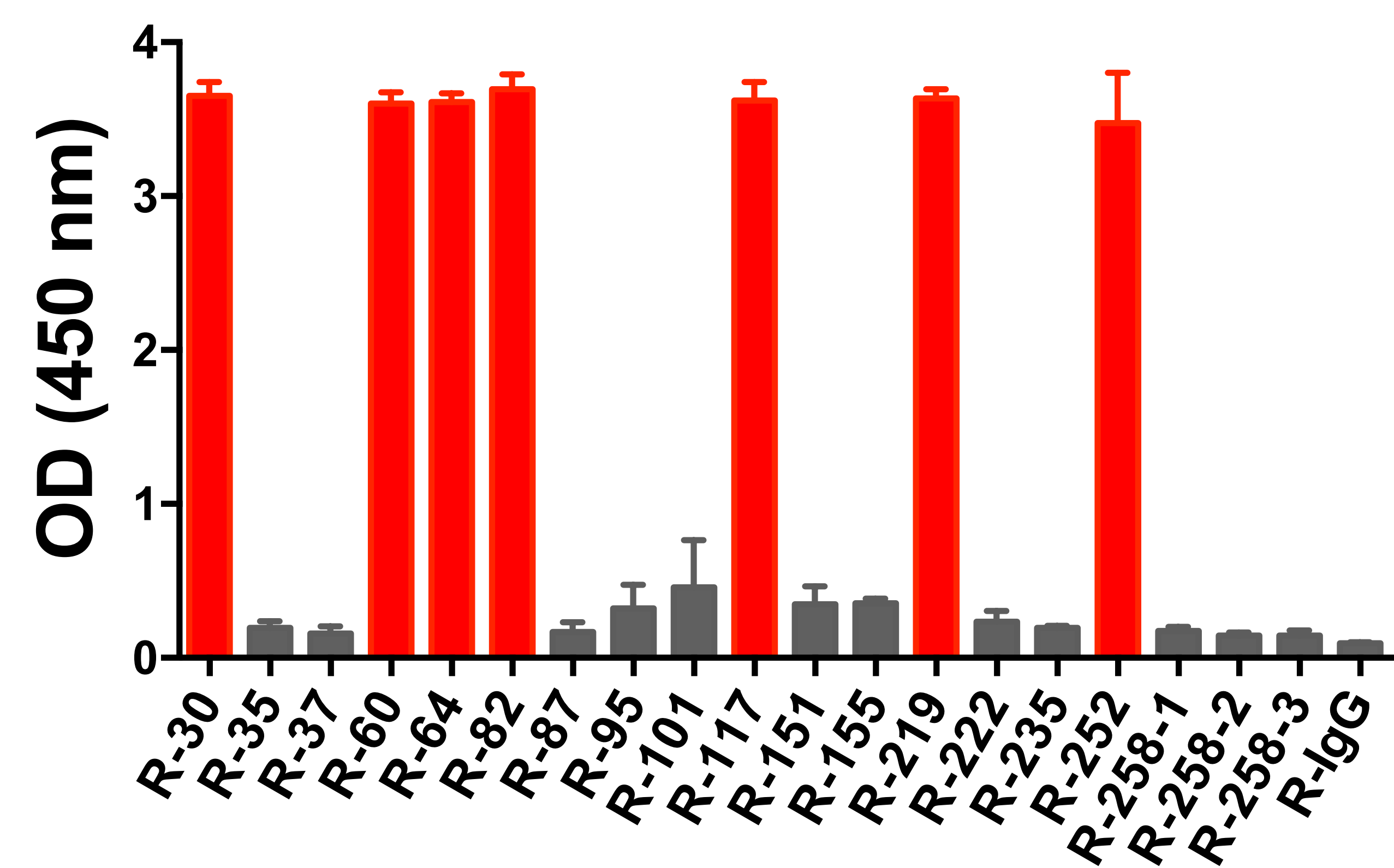
C



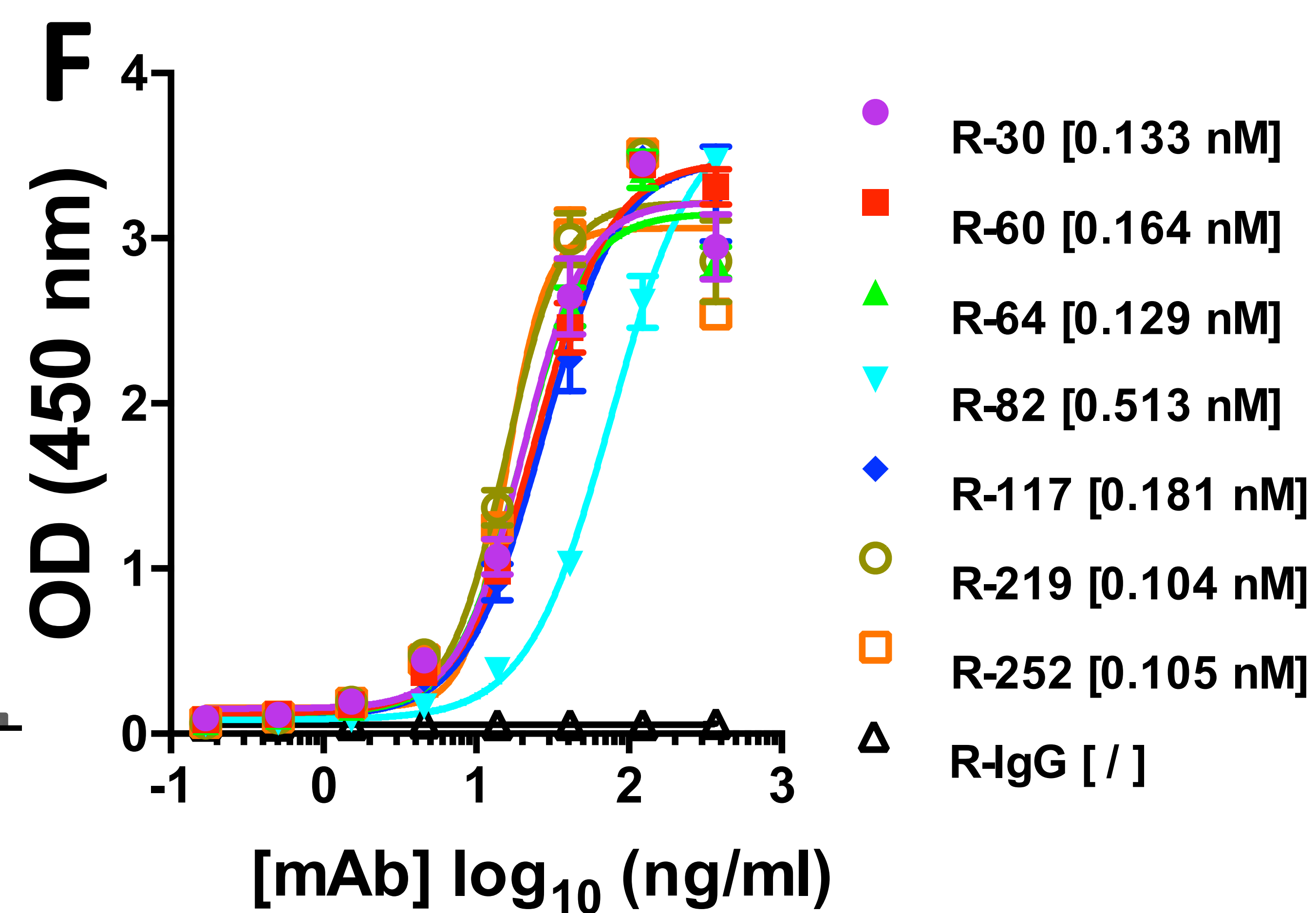
D



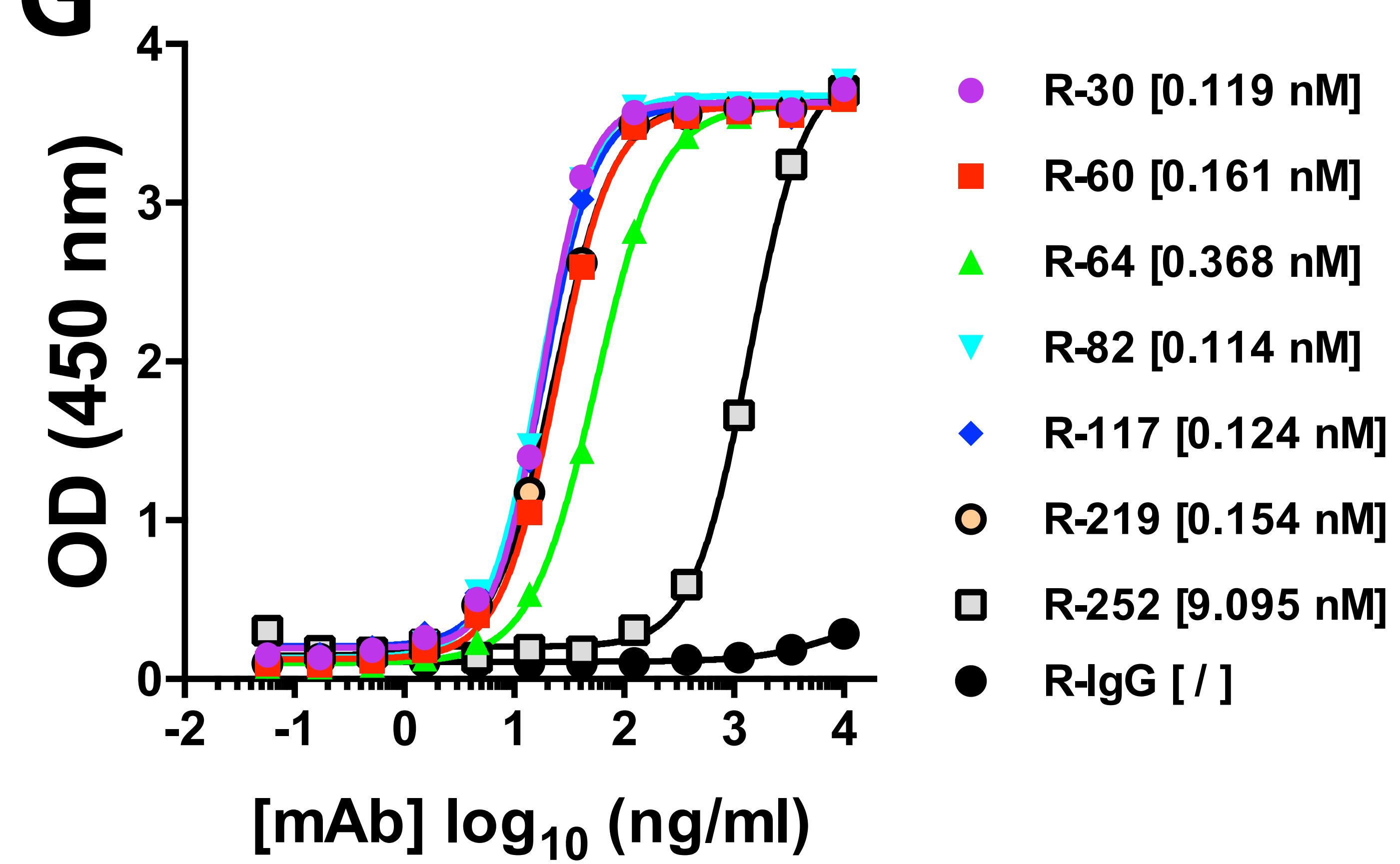
E



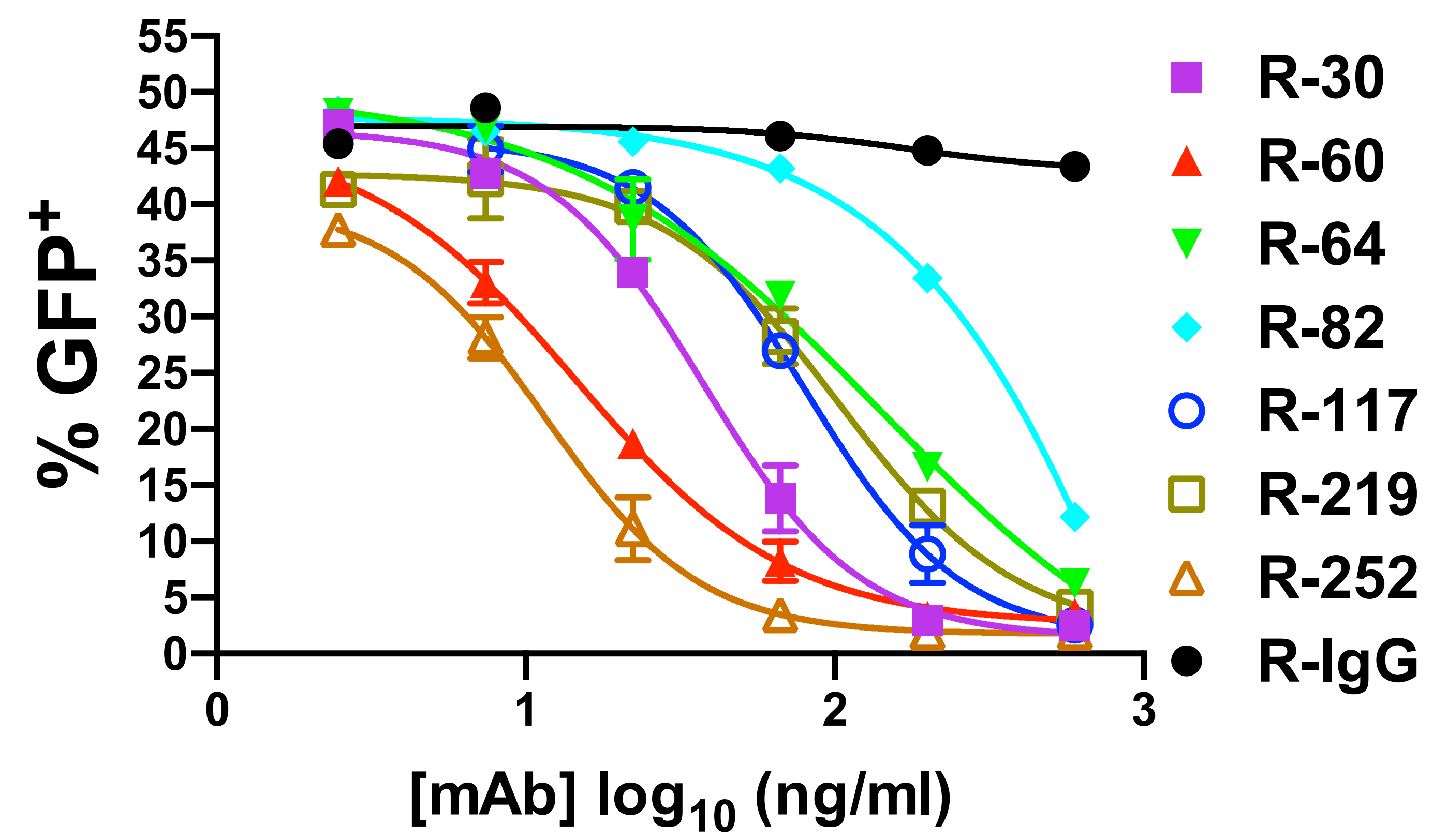
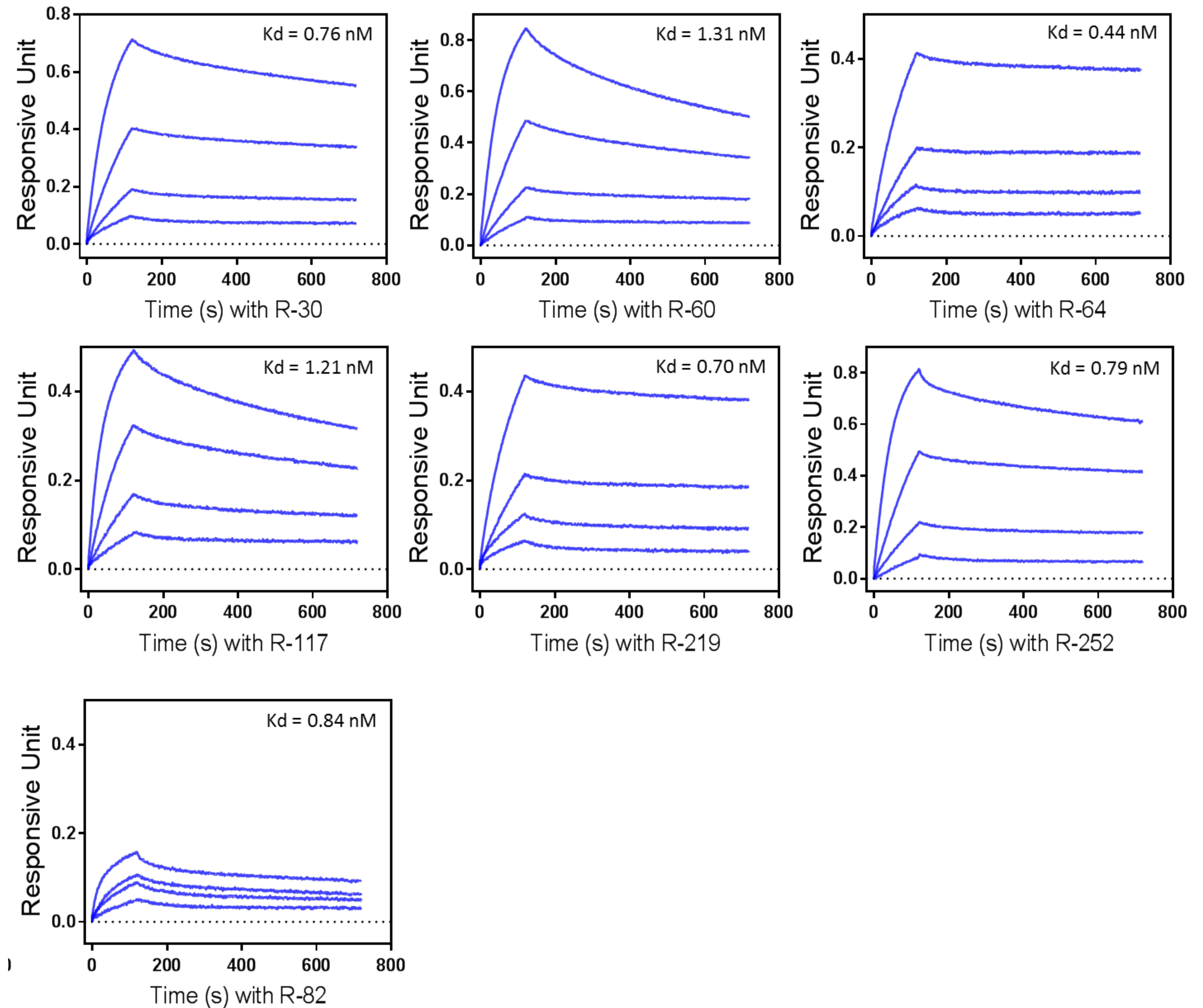
F



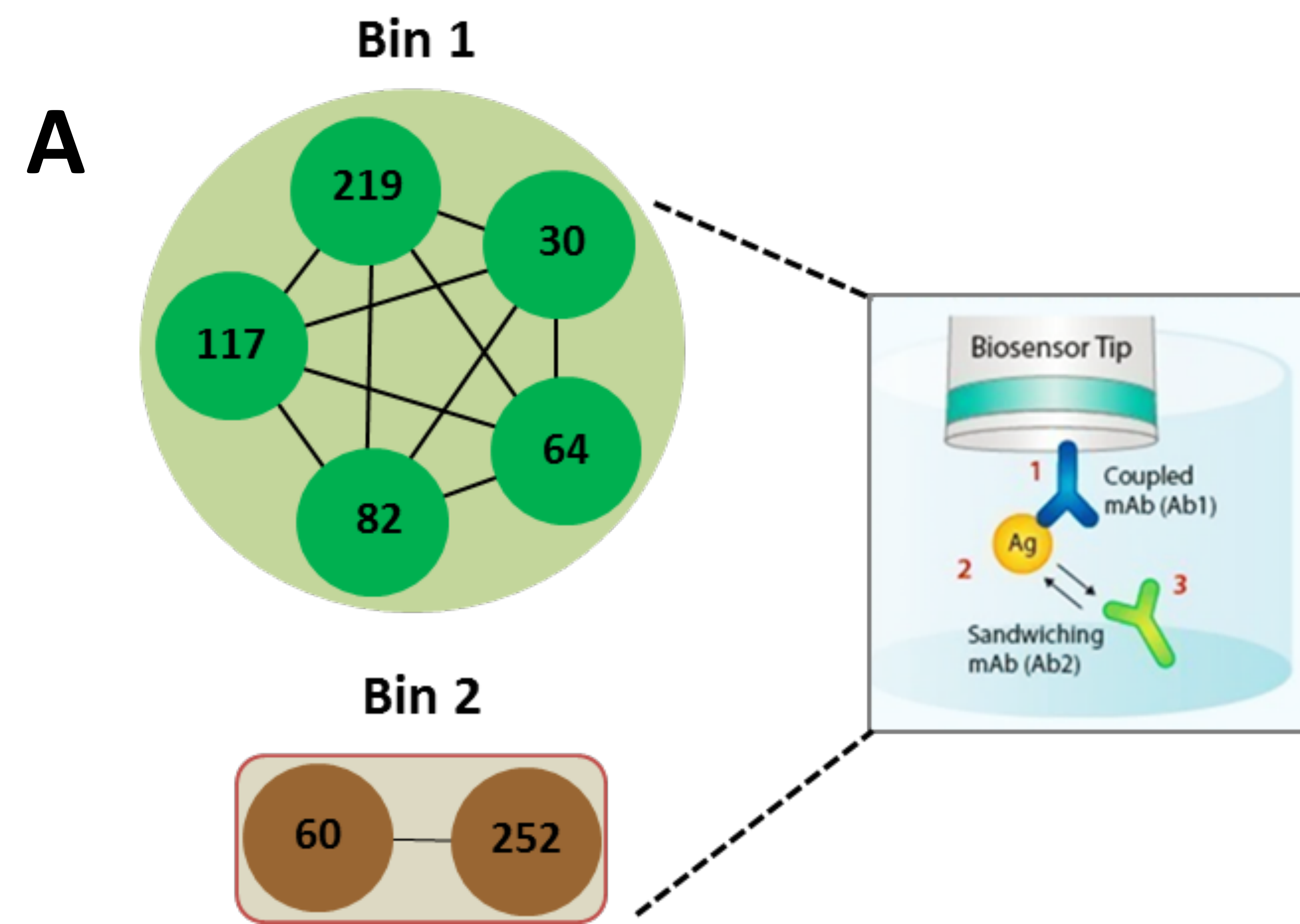
G



Supplementary Fig 3

A**B**

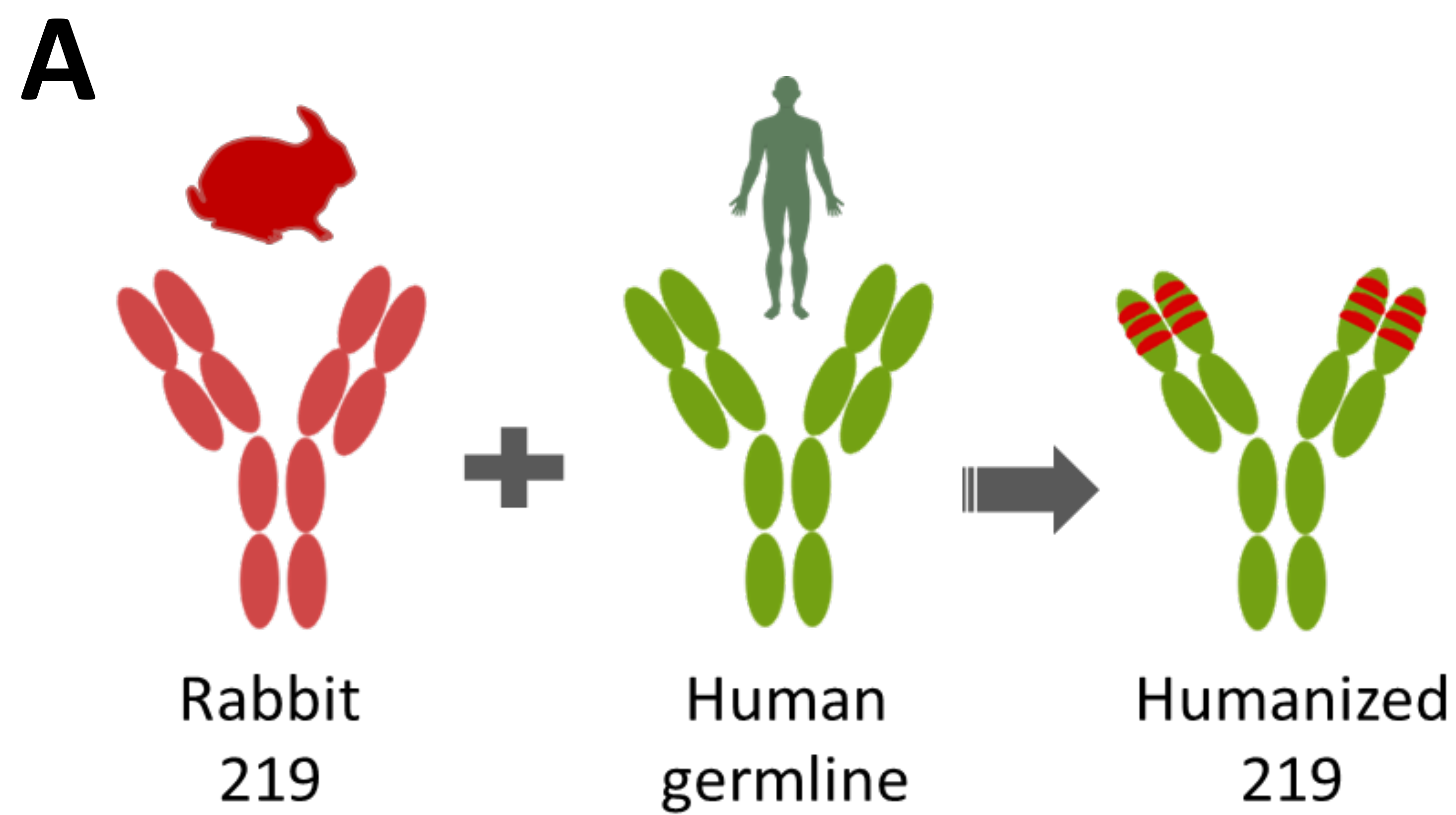
Supplementary Fig 4



B

	Bin A					Bin B	
	R-30	R-64	R-82	R-117	R-219	R-60	R-252
R-30	+	+	+	+	+		
R-64	+	+	+	+	+		
R-82	+	+	+	+	+		
R-117	+	+	+	+	+		
R-219	+	+	+	+	+		
R-60						+	+
R-252						+	+

Supplementary Fig 5



B

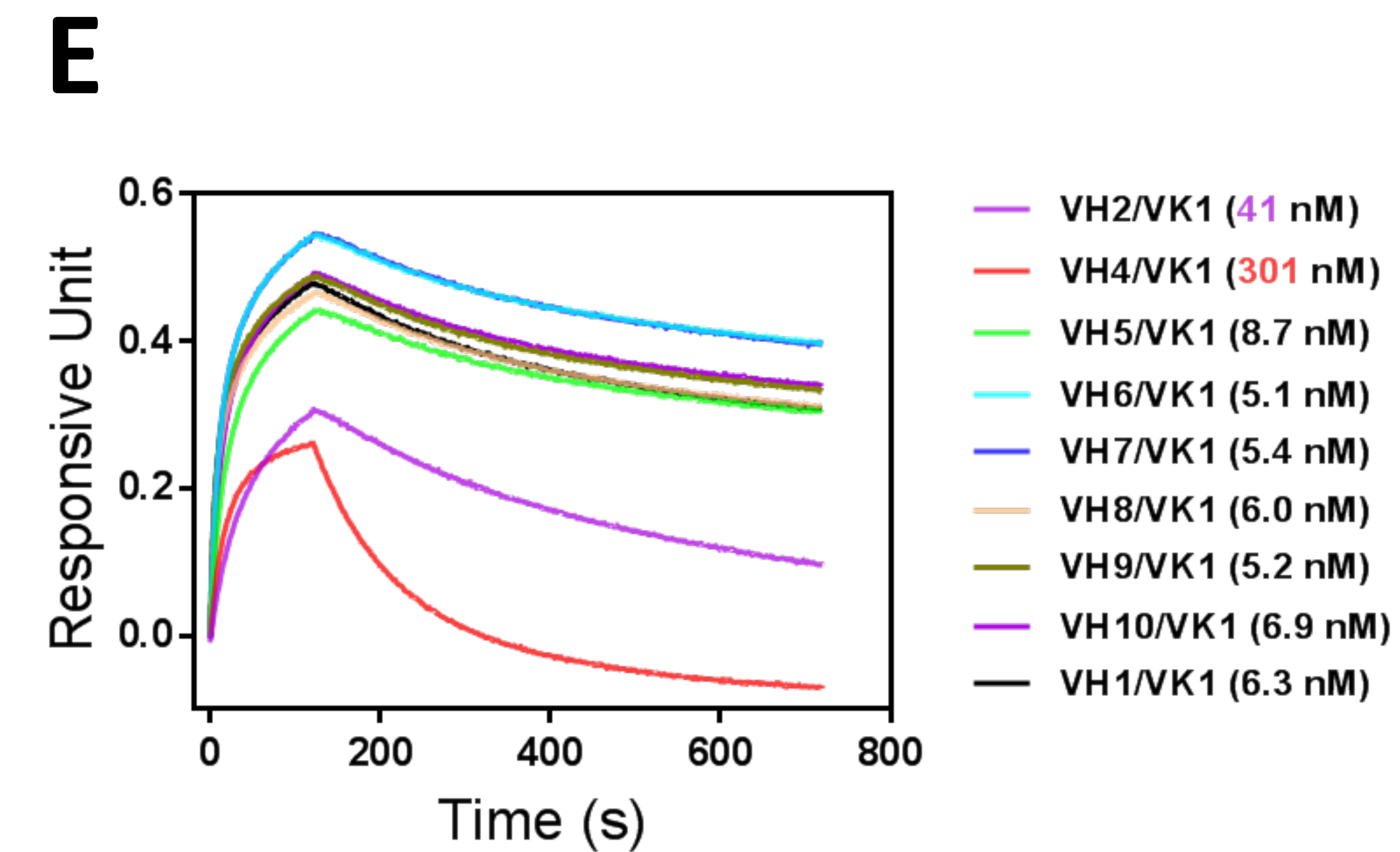
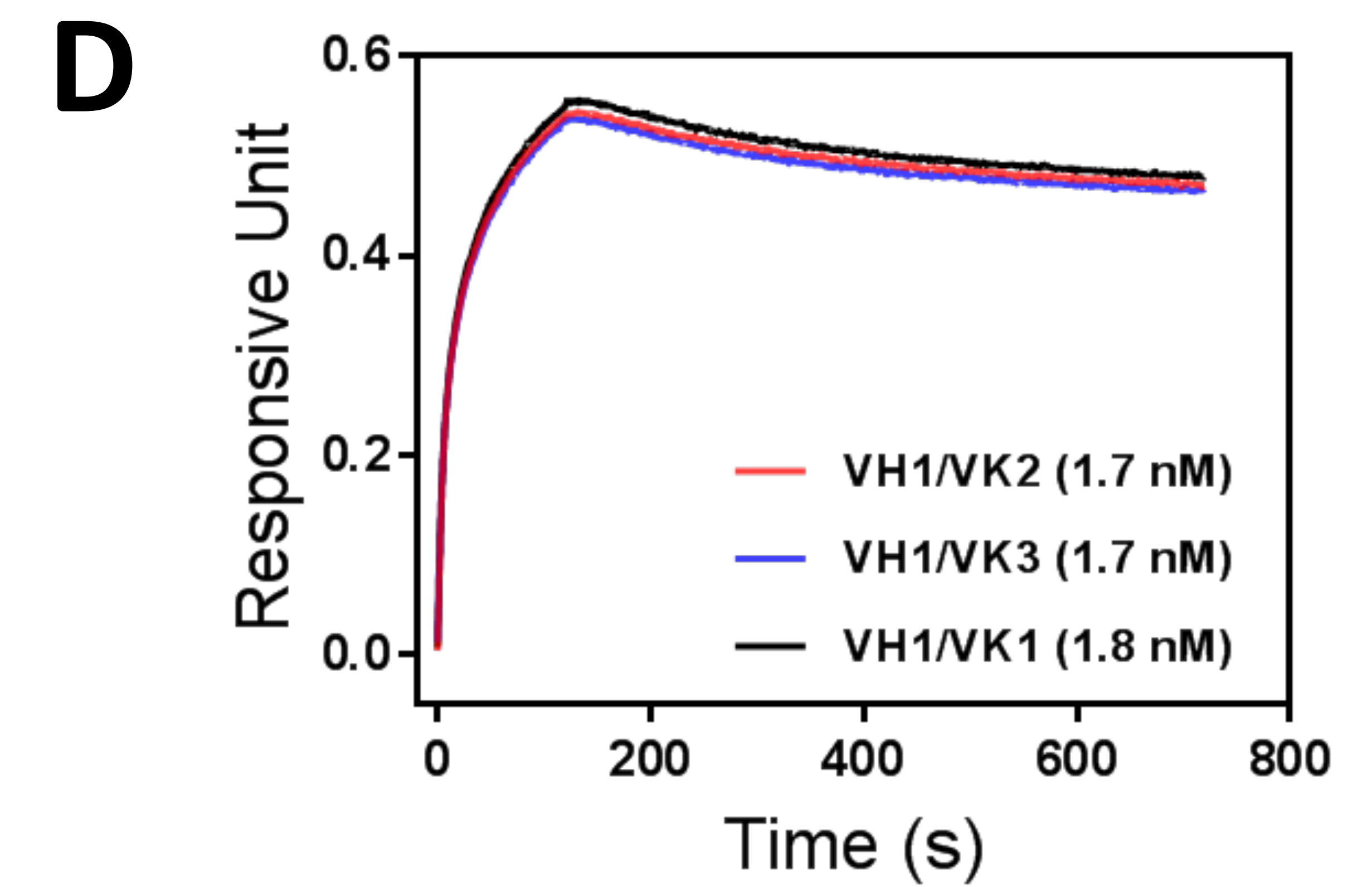
	CDR1-IMGT (27-38)	CDR2-IMGT (56-65)	CDR3-IMGT (105-117)
IGHV3-53*01	.....GFTVSSNYMS.....	.....WVSVIYSGGSTYYADSVKG.....	.....AR AEYFQH.....
R-219-VH	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGNSGLNLDL</u>
h219-VH1	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGNSGLNLDL</u>

	CDR1-IMGT (27-38)	CDR2-IMGT (56-65)	CDR3-IMGT (105-117)
IGKV1-5*03	.....RASQSISWLAAY.....	.....LLIYKASSLES.....	.....QQYNSYS...LT.....
R-219-VK	.....<u>QASQSIGSWLAAY</u>.....	.....<u>LLIYQASRLAS</u>.....	.....<u>QQAEYSGDVENT</u>
h219-VK1	.....<u>QASQSIGSWLAAY</u>.....	.....<u>LLIYQASRLAS</u>.....	.....<u>QQAEYSGDVENT</u>

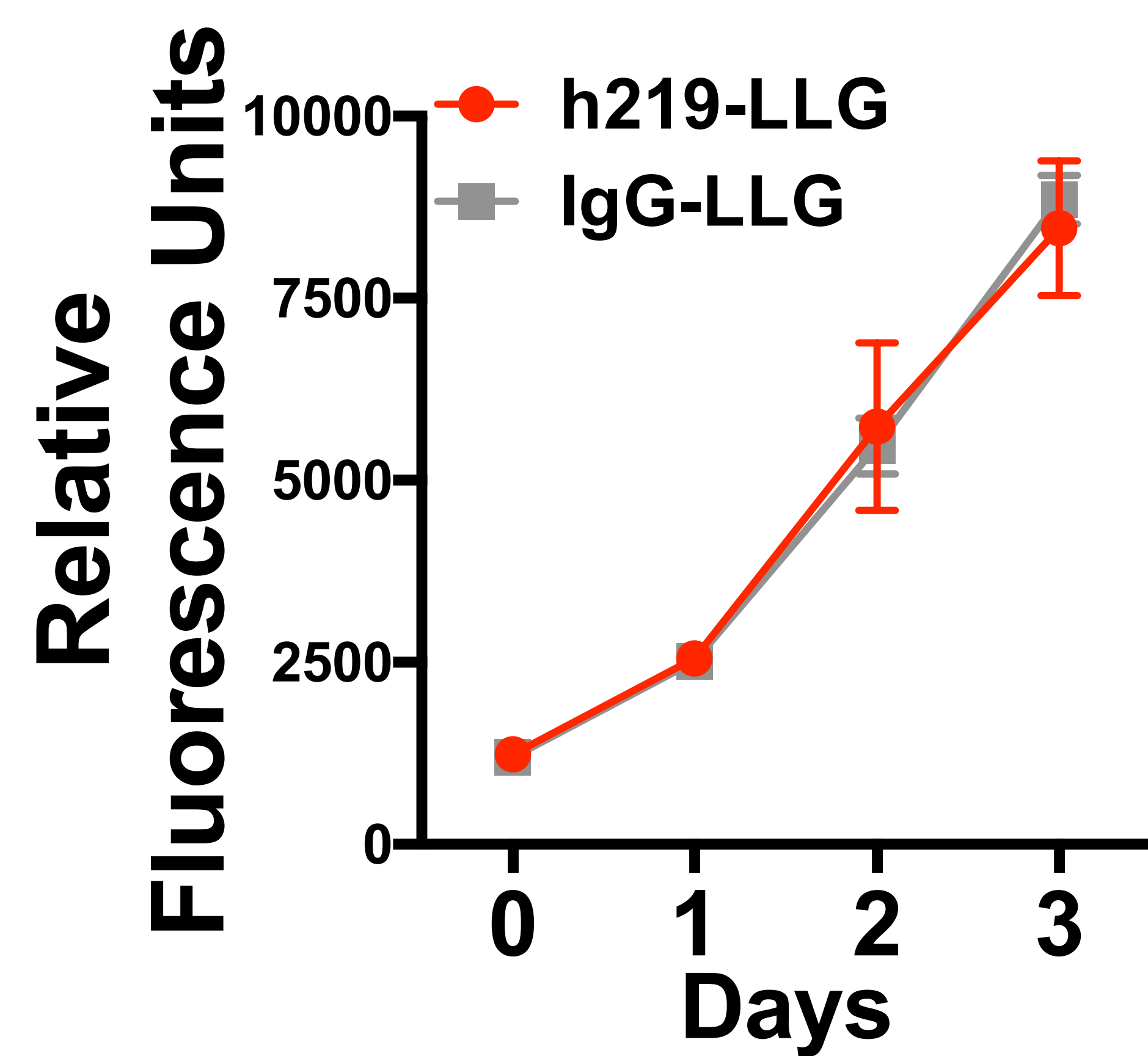
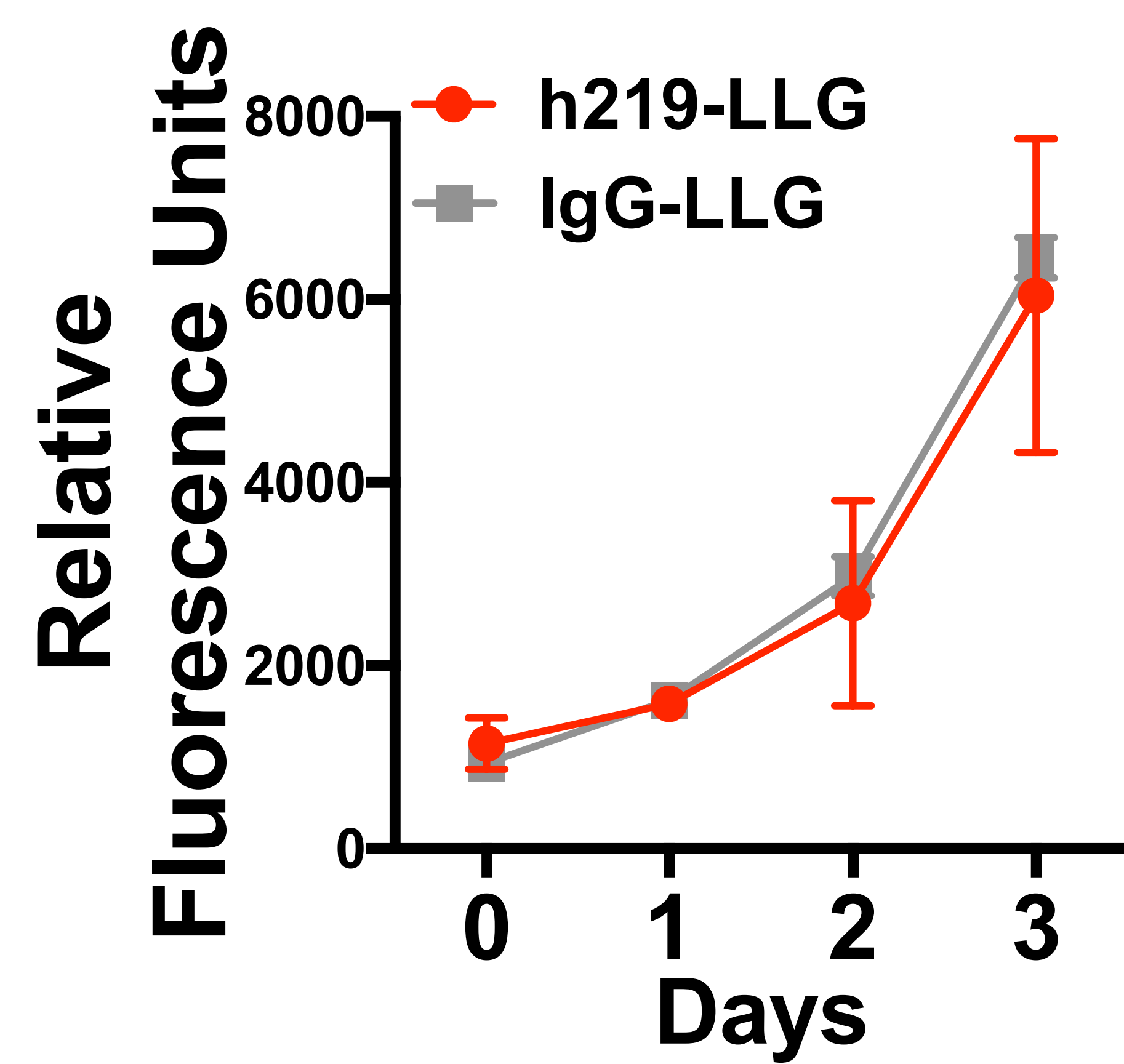
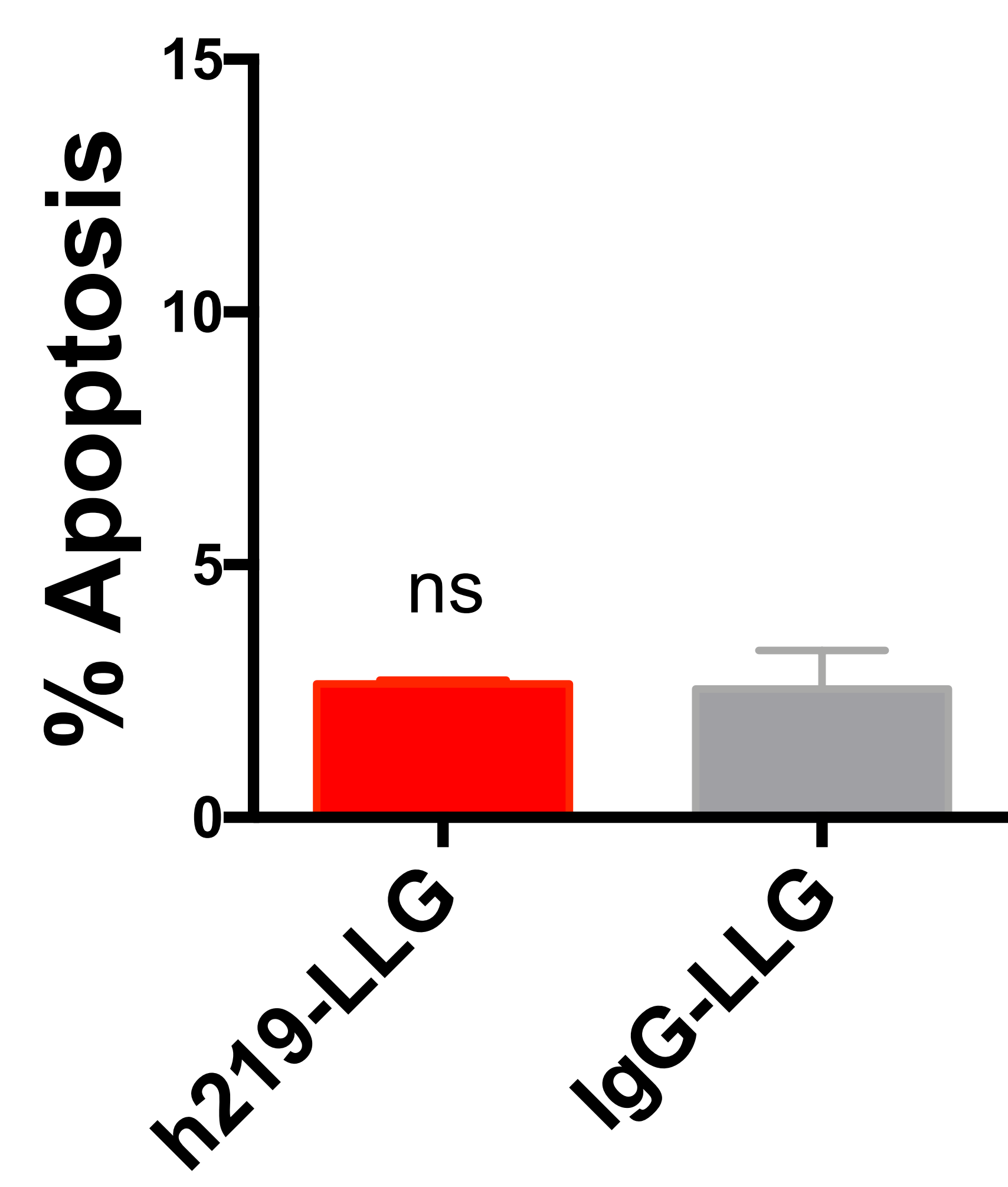
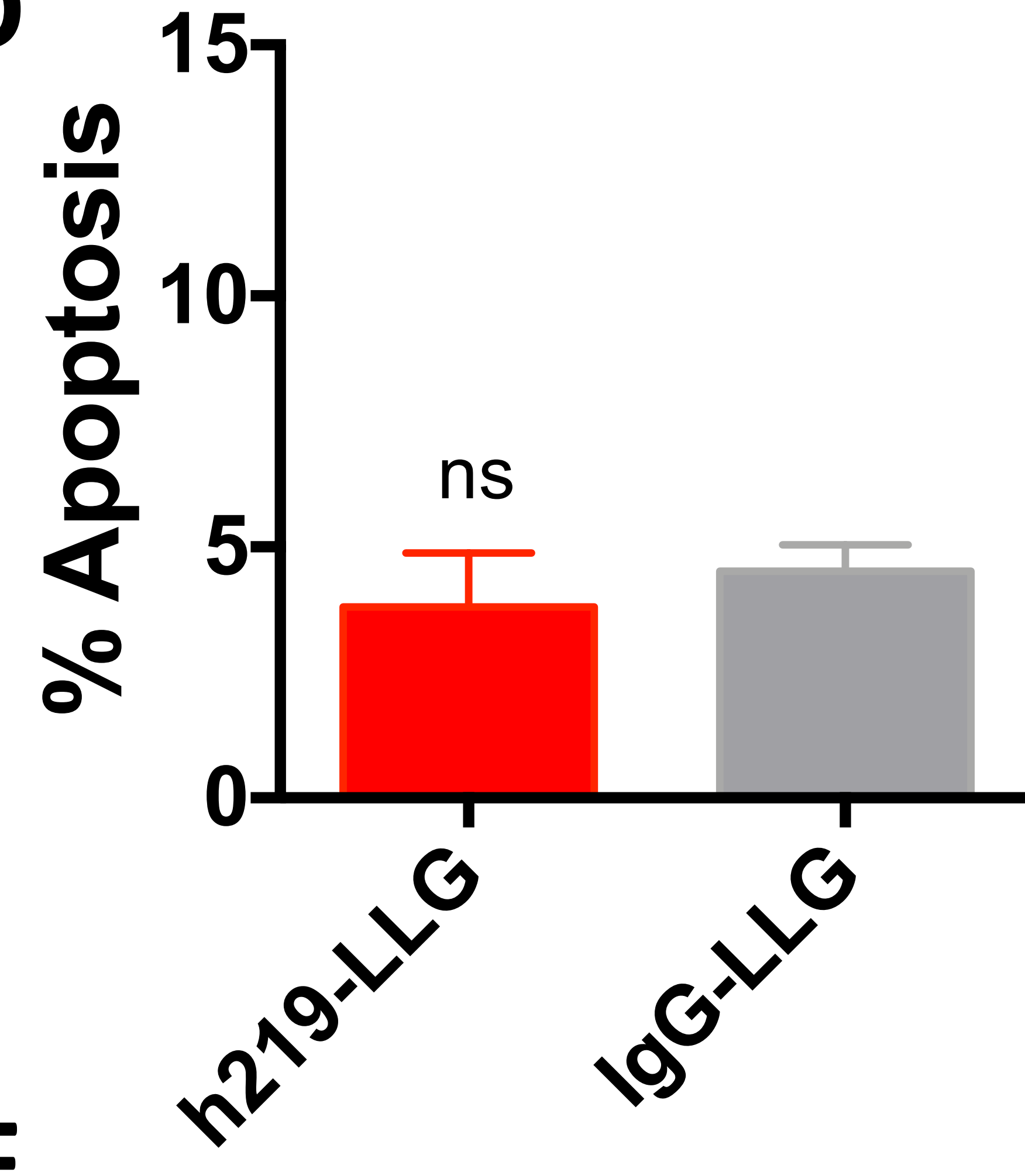
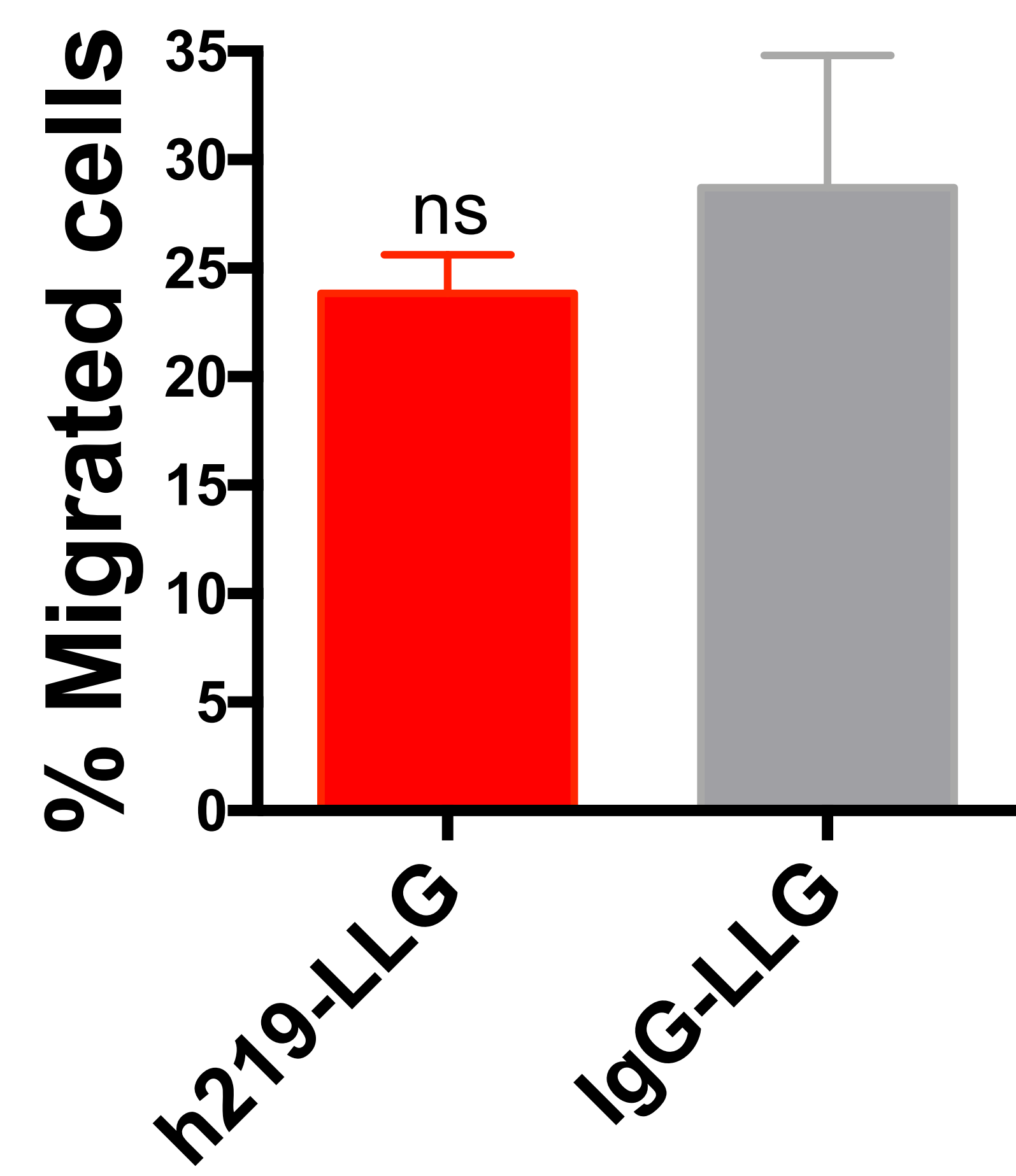
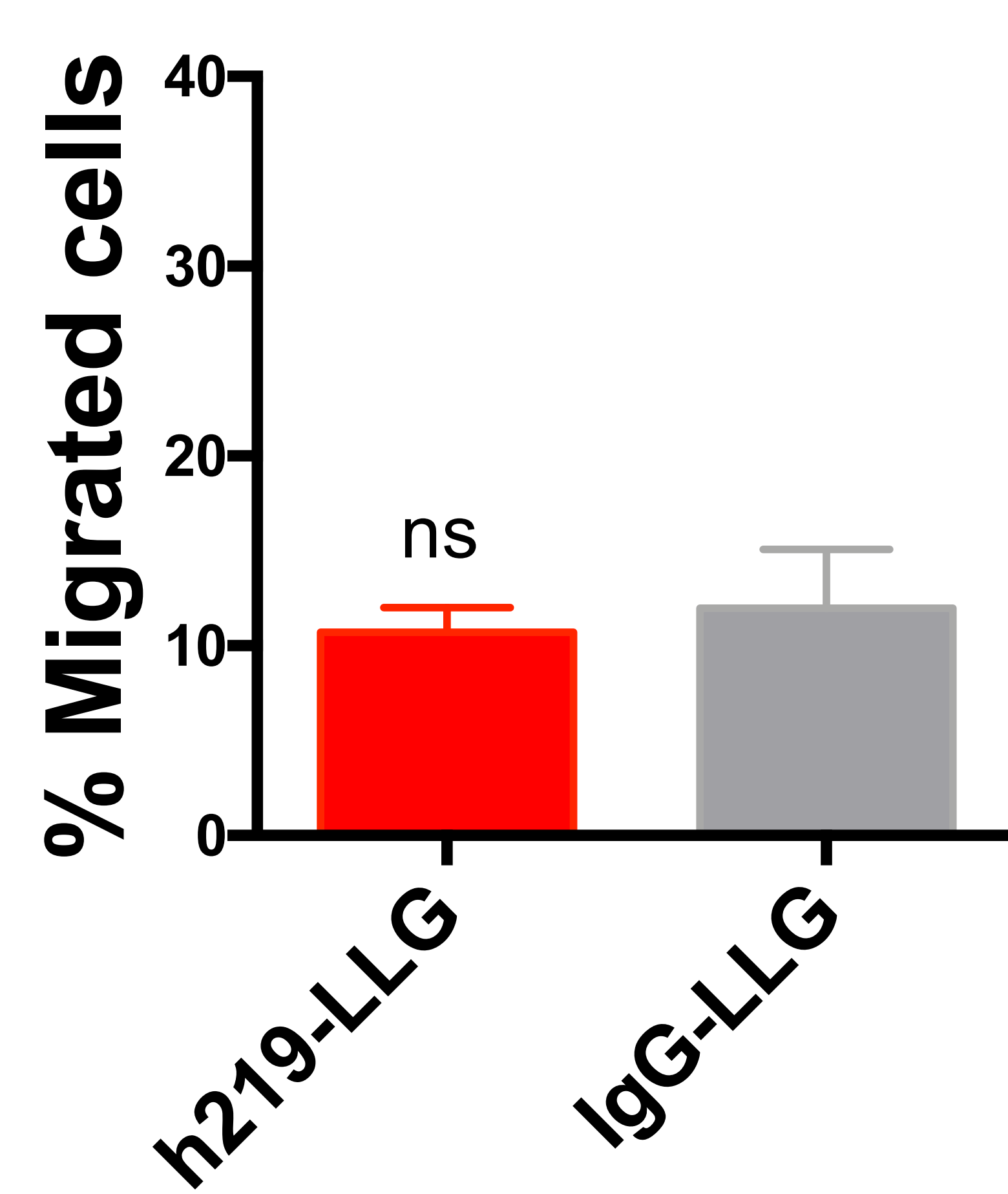
C

	CDR1-IMGT (27-38)	CDR2-IMGT (56-65)	CDR3-IMGT (105-117)
h219-VH1	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGNSGLNLDL</u>
h219-VH2	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGNVGLNLDL</u>
h219-VH4	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGNQGLNLDL</u>
h219-VH5	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGVSGLNLDL</u>
h219-VH6	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGDSGLNLDL</u>
h219-VH7	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGESGLNLDL</u>
h219-VH8	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGQSGLNLDL</u>
h219-VH9	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGSSGLNLDL</u>
h219-VH10	.....<u>GFTVTRYMN</u>.....	.....<u>WIGYIYASSKTYANWAKG</u>.....	.....<u>ARGGVGTSGLNLDL</u>

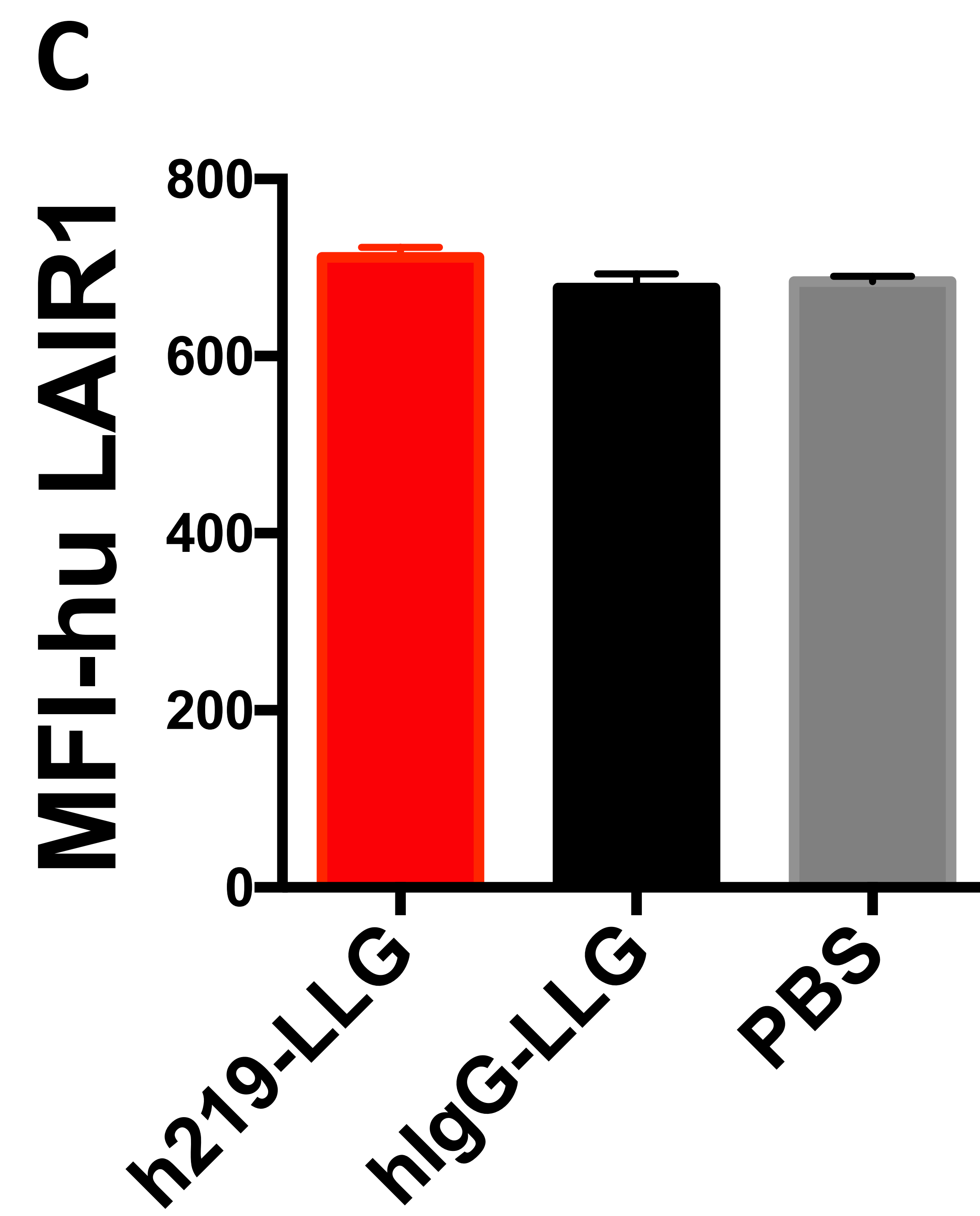
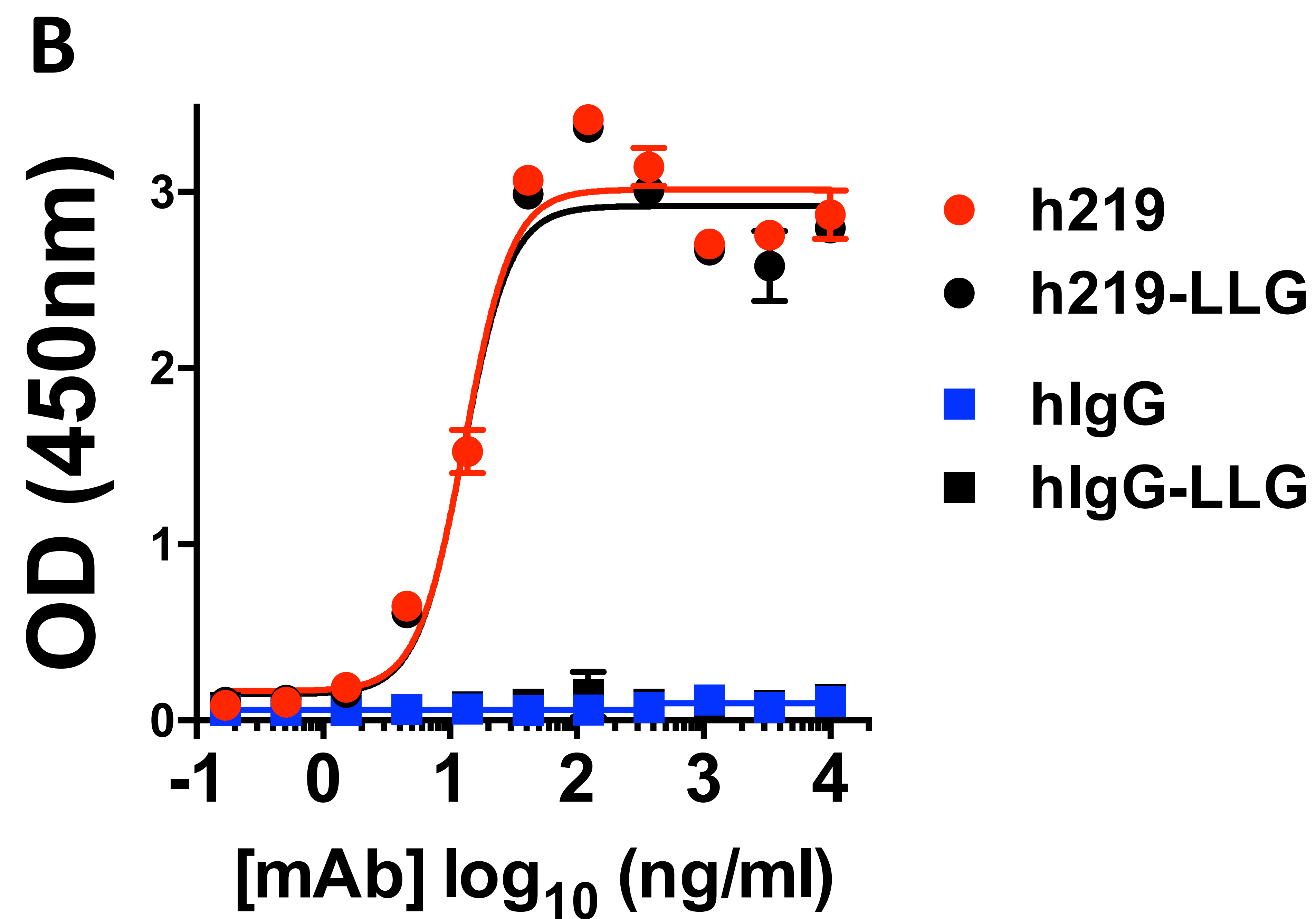
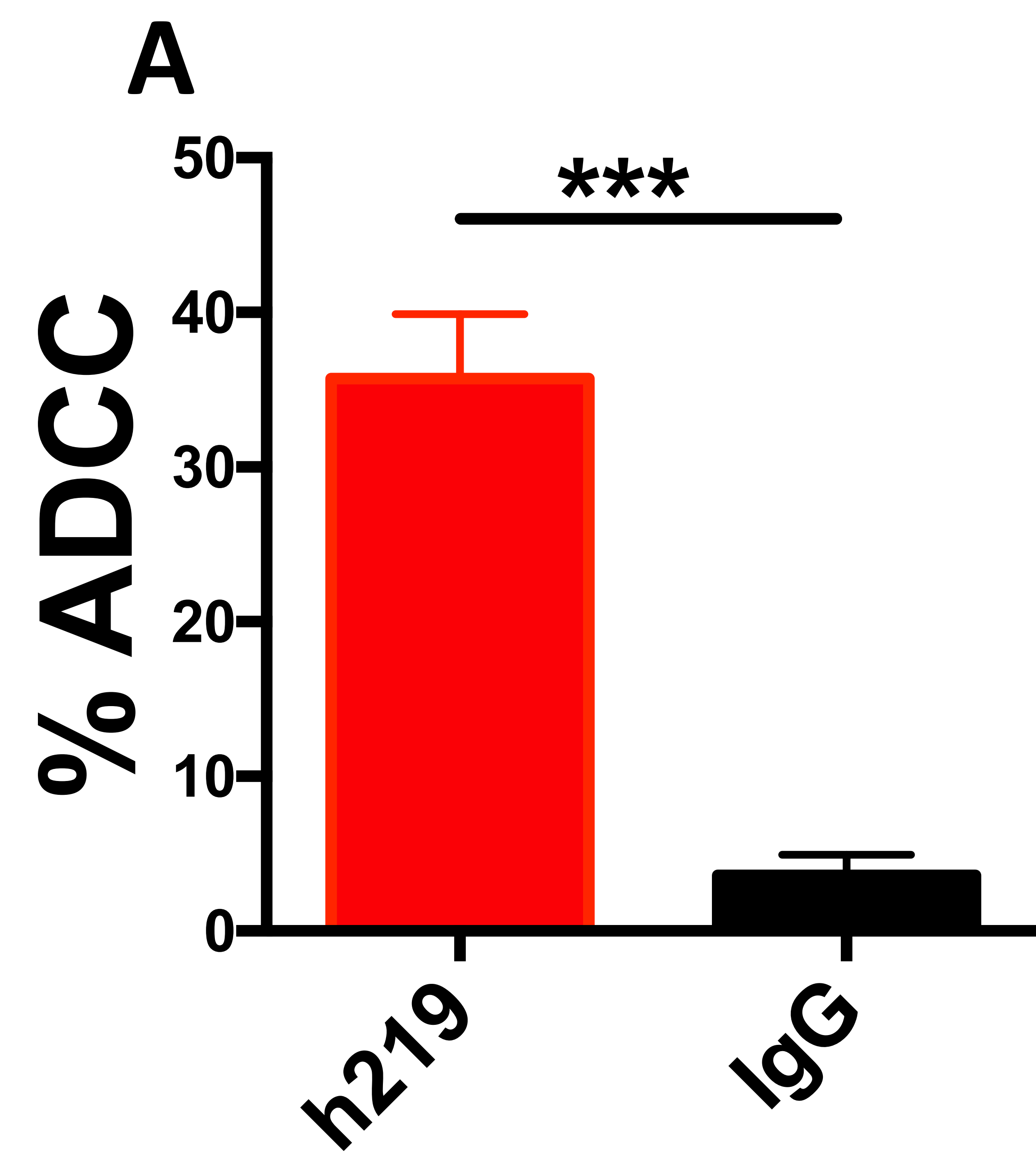
	CDR1-IMGT (27-38)	CDR2-IMGT (56-65)	CDR3-IMGT (105-117)
h219-VK1	.....<u>QASQSIGSWLAAY</u>.....	.....<u>LLIYQASRLAS</u>.....	.....<u>QQAEYSGDVENT</u>
h219-VK2	.....<u>RASQSIGSWLAAY</u>.....	.....<u>LLIYQASRLAS</u>.....	.....<u>QQAEYSGDVENV</u>
h219-VK3	.....<u>RASQSIGSWLAAY</u>.....	.....<u>LLIYQASRLAS</u>.....	.....<u>QQAEYSGDVEDT</u>



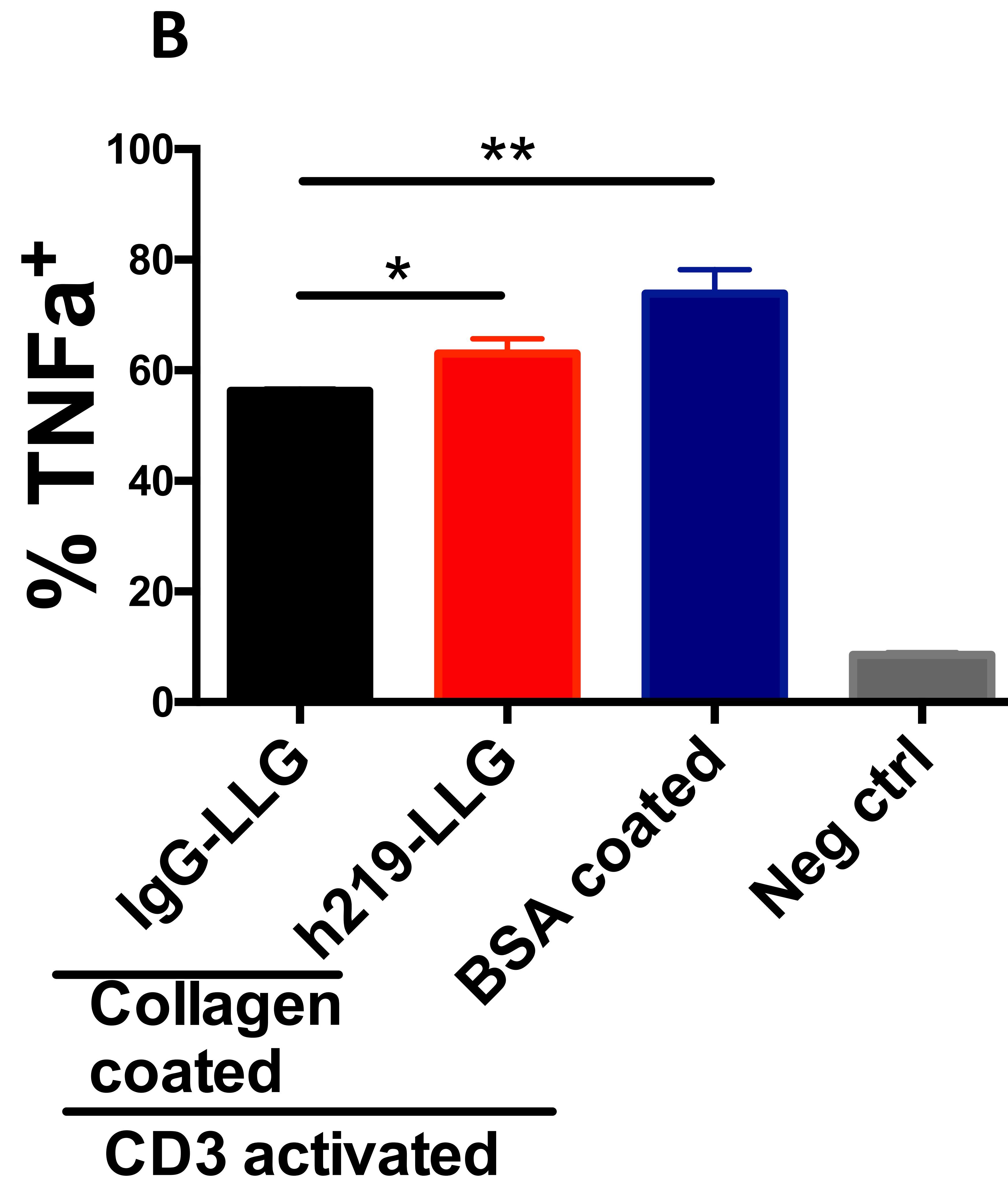
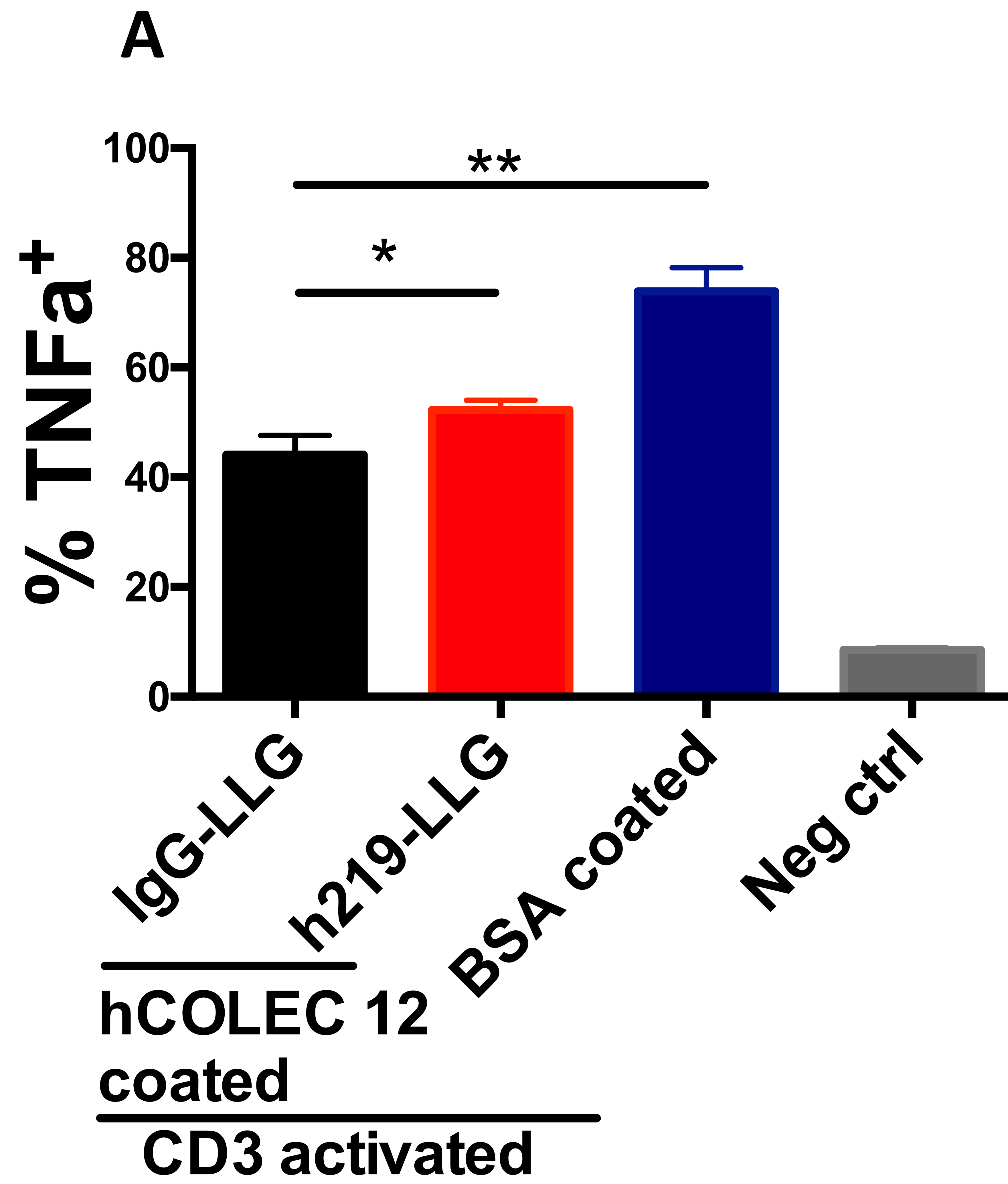
Supplementary Fig 6

A**B****C****D****E****F**

Supplementary Fig 7

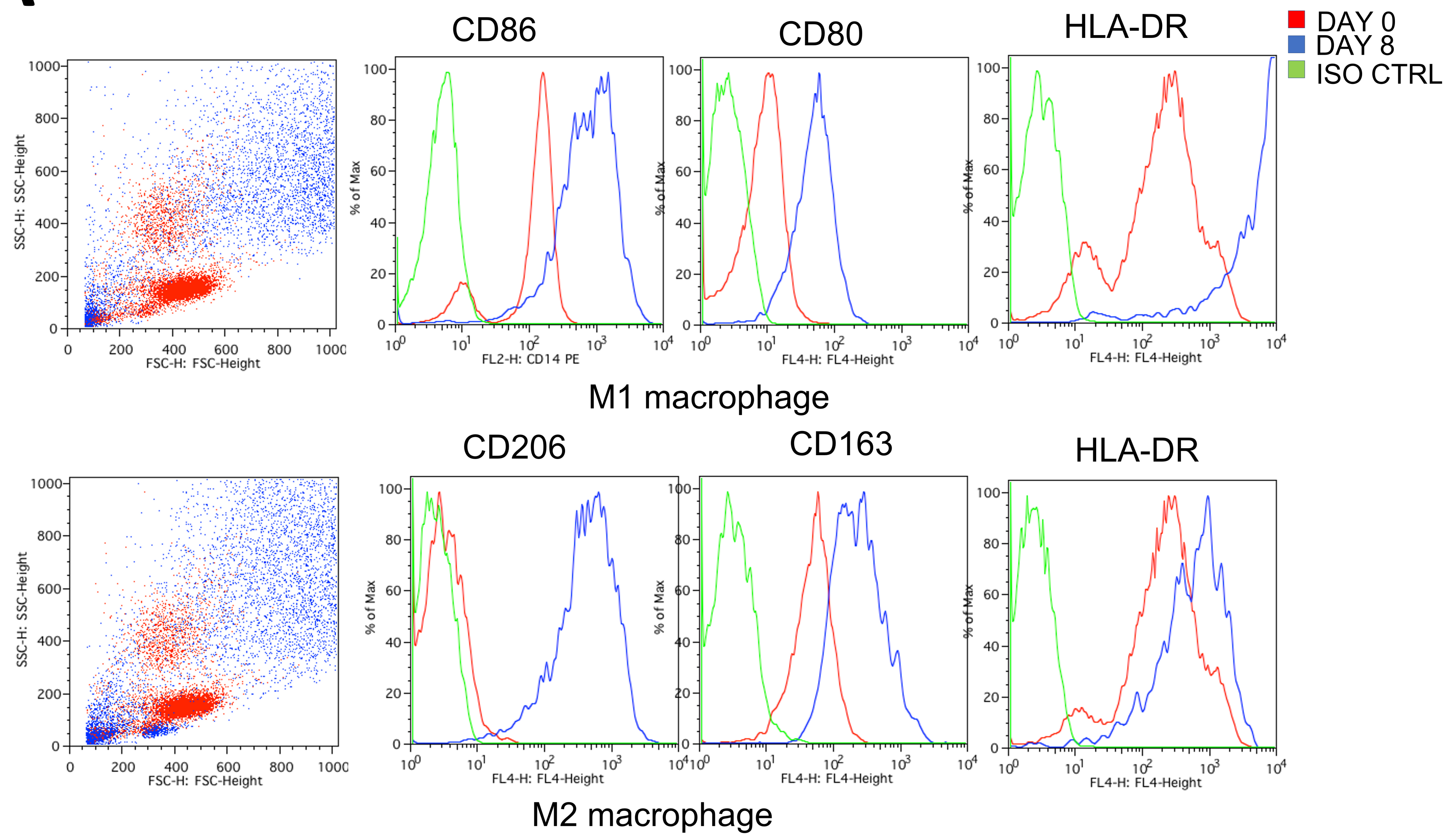


Supplementary Fig 8

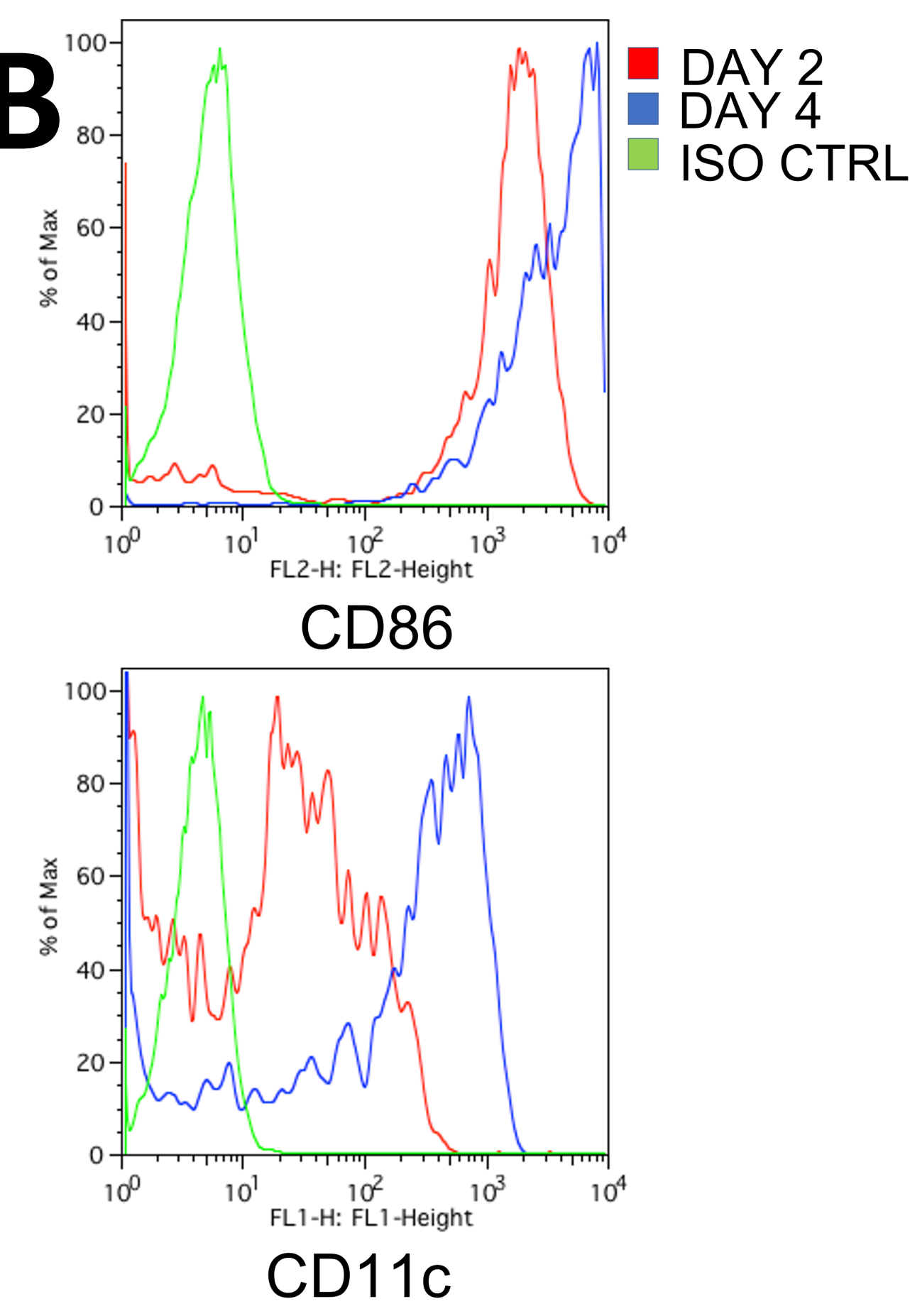


Supplementary Fig 9

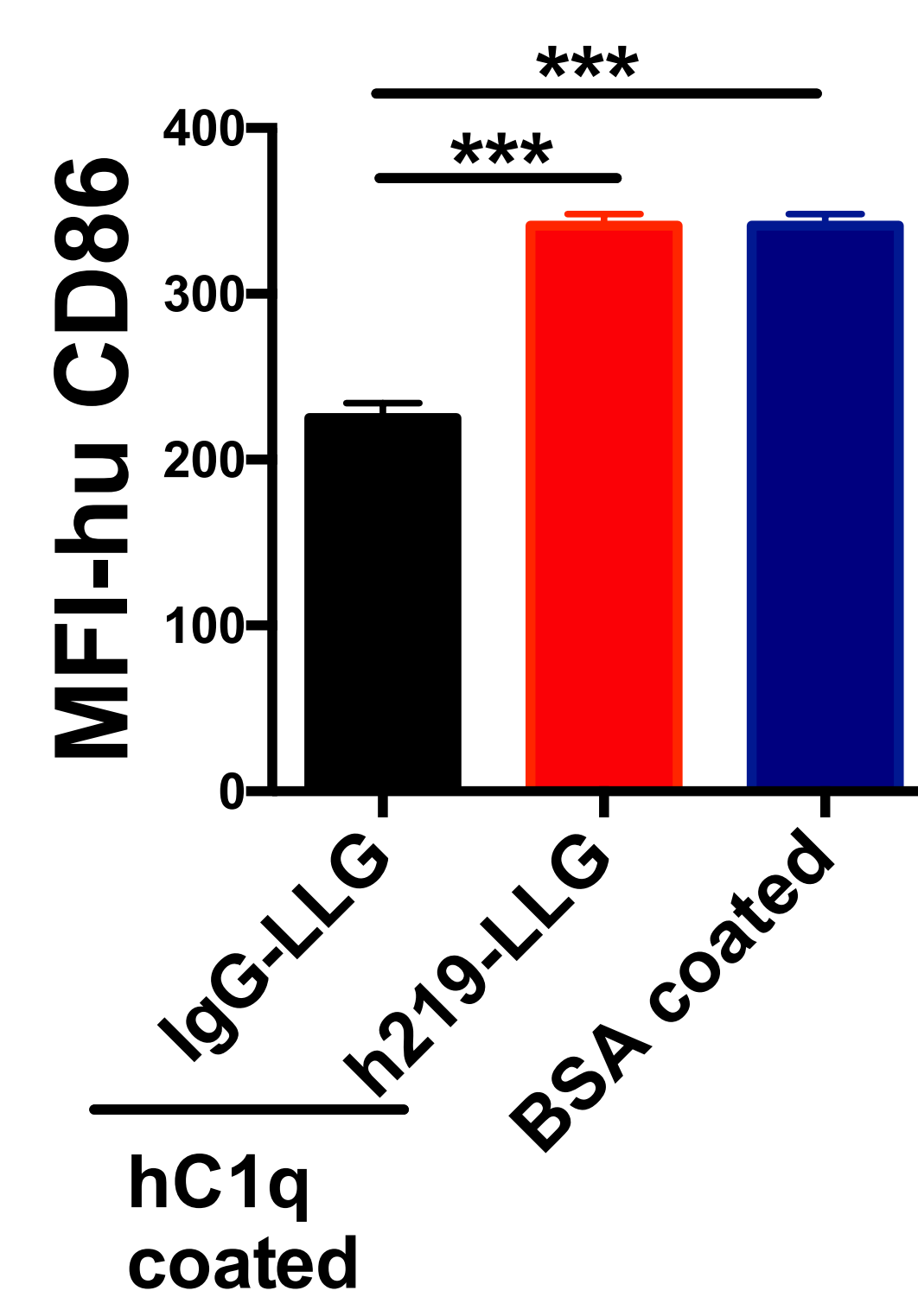
A



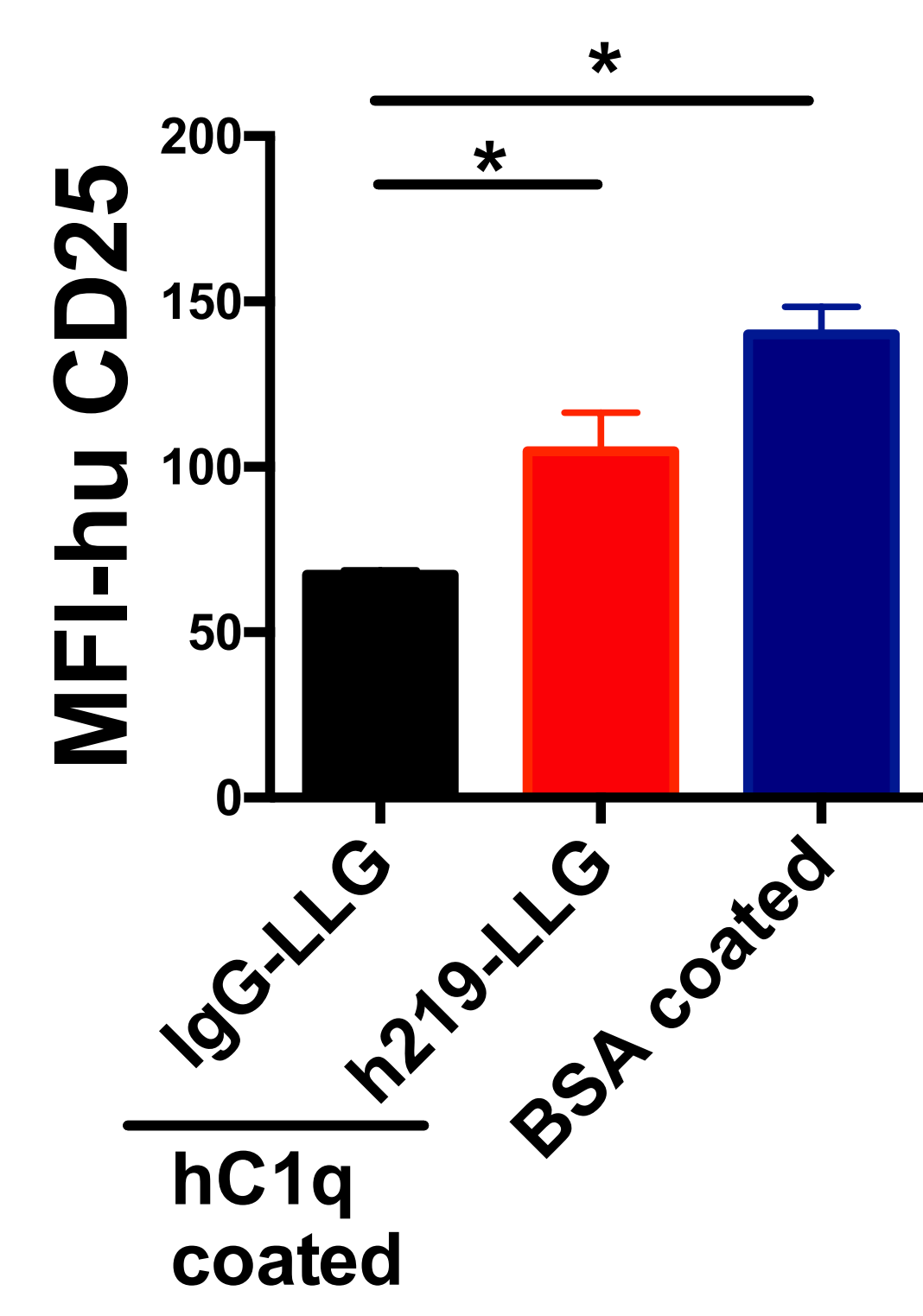
B



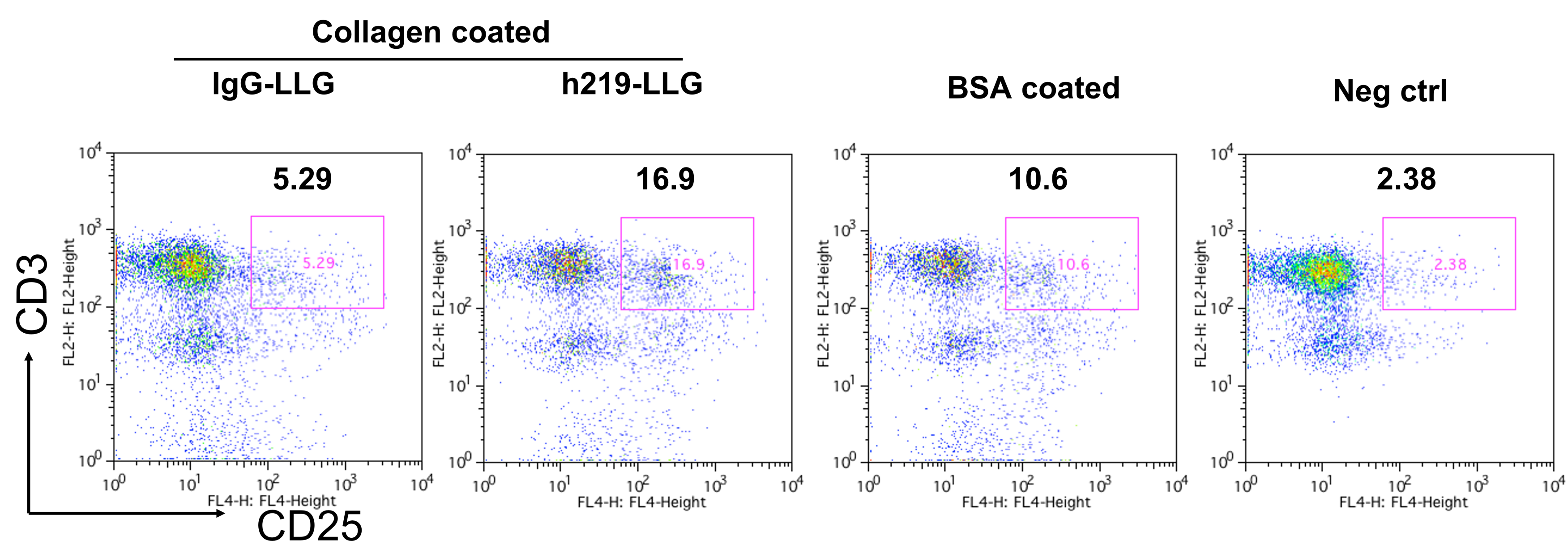
C



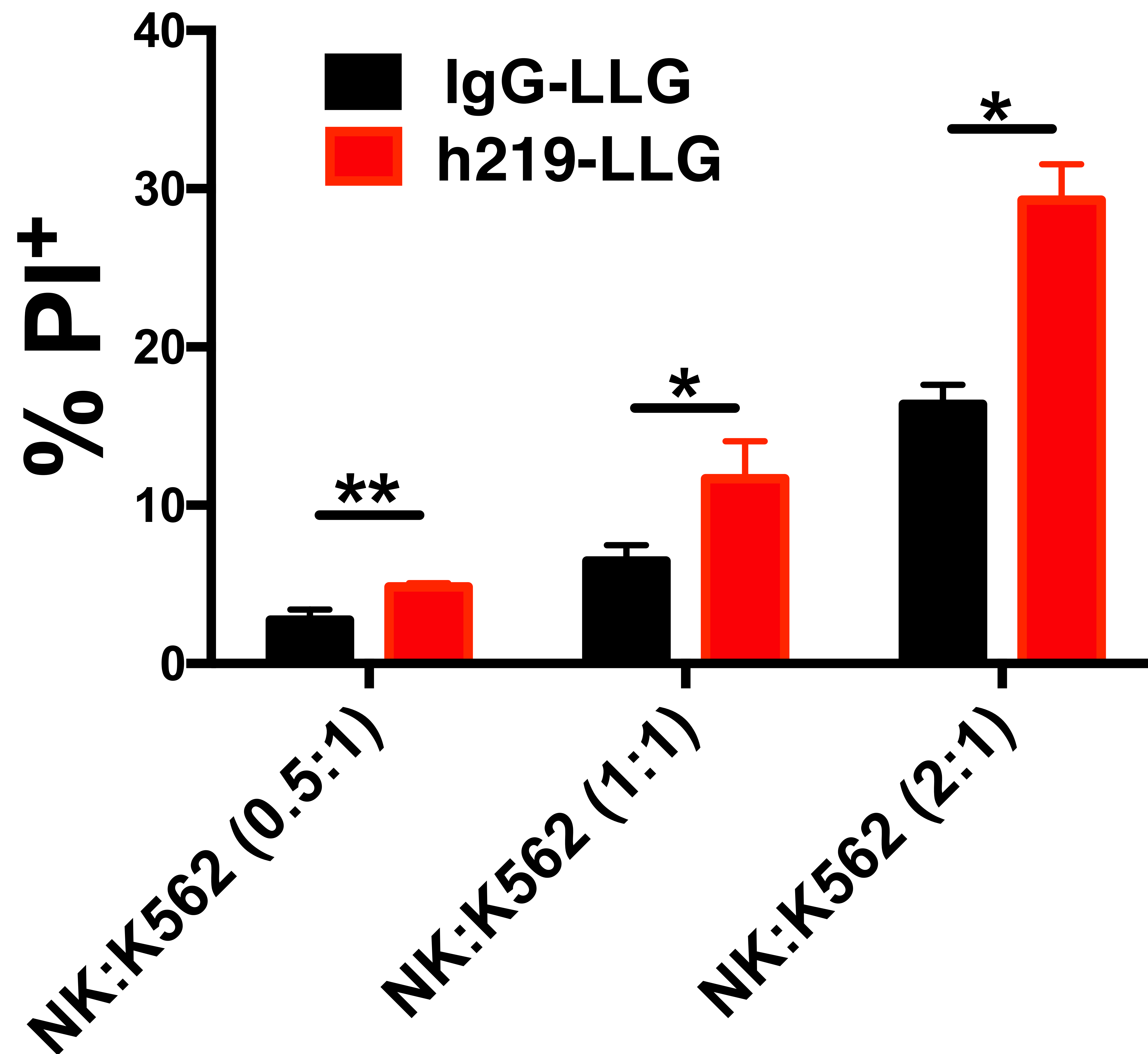
D



E



Supplementary Fig 10



Supplementary Fig 11

