Figure 1

A

Clone ID	CDR-L1	CDR-L2	CDR-L3	CDR-H1	CDR-H2	CDR-H3	Epitope Group
LRP5 - A7	SVSSA	SASSLYS	AWGWGLF	LSYSSM	SIYPYYGYTY	HGAM	2
LRP5 - A9	SVSSA	SASSLYS	VHYSPYSLI	ISSYSI	SSSYYGYTY	TVRGSKKPYFSGWAM	ND
LRP5 - C5	SVSSA	SASSLYS	YQYSGLI	FSSSSI	SISSSYGYTY	SSYYSSVSSSVYAL	1
LRP5 - C12	SVSSA	SASSLYS	FSHWSLI	FSSSSI	SIYSSYGSTS	TVRGSKKPYFSGWAM	2
LRP5 - D9	SVSSA	SASSLYS	ASYSPI	ISYSYI	SIYSSYGYTY	HYSYFFYAM	1
LRP5 - E5	SVSSA	SASSLYS	YHYYYLF	IYSYSI	SIYPYSSYTS	YAVYFPGYYWGM	4
LRP5 - G2	SVSSA	SASSLYS	ASYAPI	LSYYYM	SIYSSYGYTY	WSHVSGHYSGM	1
LRP5 - G9	SVSSA	SASSLYS	SSSSPI	ISYSYI	SIYSSYGYTY	WGAYHSSGYGM	1
LRP5 - G10	SVSSA	SASSLYS	SSYSLI	FSSSSI	SISSSYGYTY	GGSGVSHYGSVYYSWWAL	2
LRP5 - G11	SVSSA	SASSLYS	GVSLI	ISYSYI	SIYPSYGYTY	AAPYYGYYYSYAM	1
LRP5 - H3	SVSSA	SASSLYS	YWFLI	LYYYYI	SISPYYGYTS	SGYGWYAM	3
LRP5 - H5	SVSSA	SASSLYS	PVGHYGYPI	LSYSSI	SISSSYGSTS	GYWAI	2
LRP5 - H9	SVSSA	SASSLYS	SSYSPI	IYSYYI	SIYSYYGYTY	SYPAM	1
LRP5 - R3O_D3	SVSSA	SASSLYS	YWAYYSPI	FSSSSI	SISSSYGYTY	SWAM	ND
LRP5 - R3O_E8	SVSSA	SASSLYS	VSYYPLI	LYYSSM	SISSYYGYTS	YWAL	ND
LRP5 - R3O_G6	SVSSA	SASSLYS	SSYSLI	ISSYSM	YISPYYGYTS	GWGSPASAGYYGL	ND

B

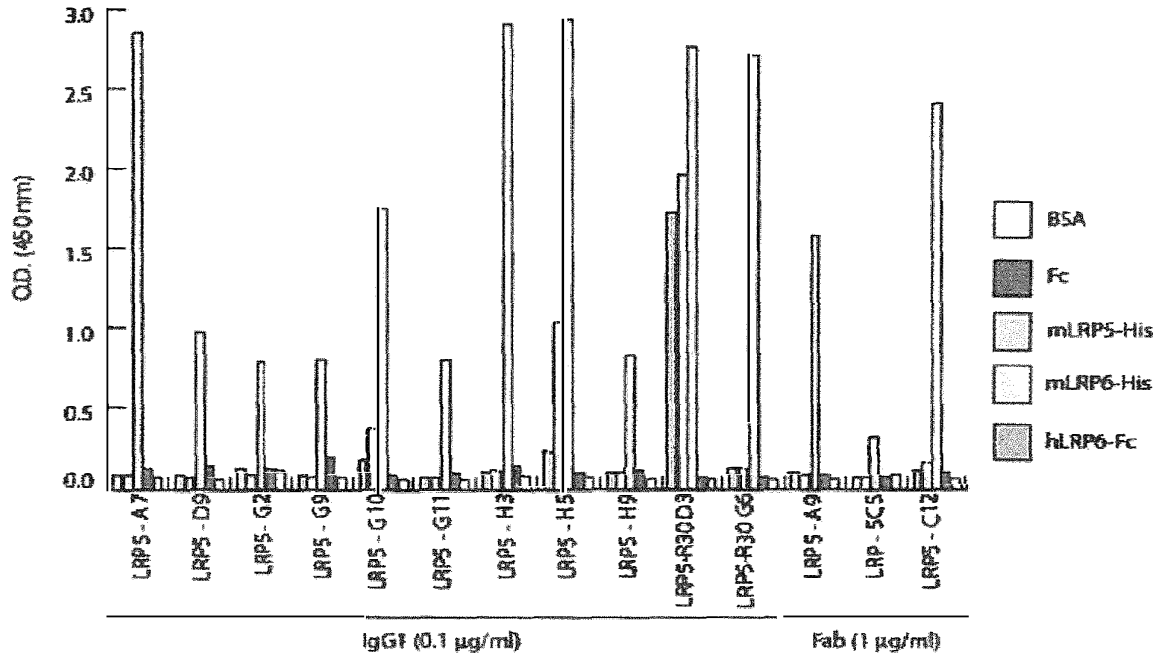
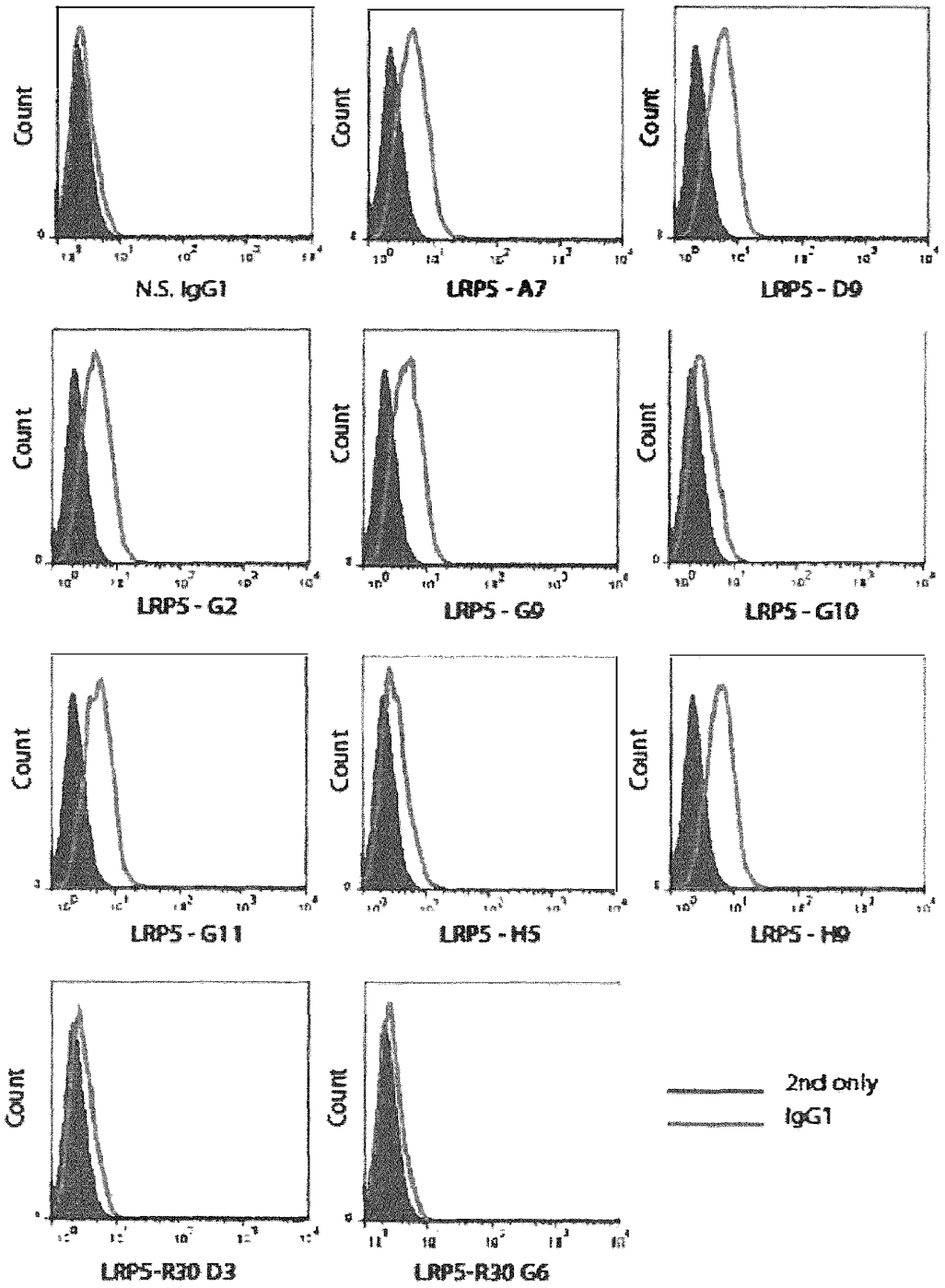


Figure 2


Count
N.S. IgG1
LRP5 - A7
LRP5 - D9
LRP5 - G2
LRP5 - G9
LRP5 - G10
LRP5 - G11
LRP5 - H5
LRP5 - H9
LRP5-R30 D3
LRP5-R30 G6
2nd only
IgG1

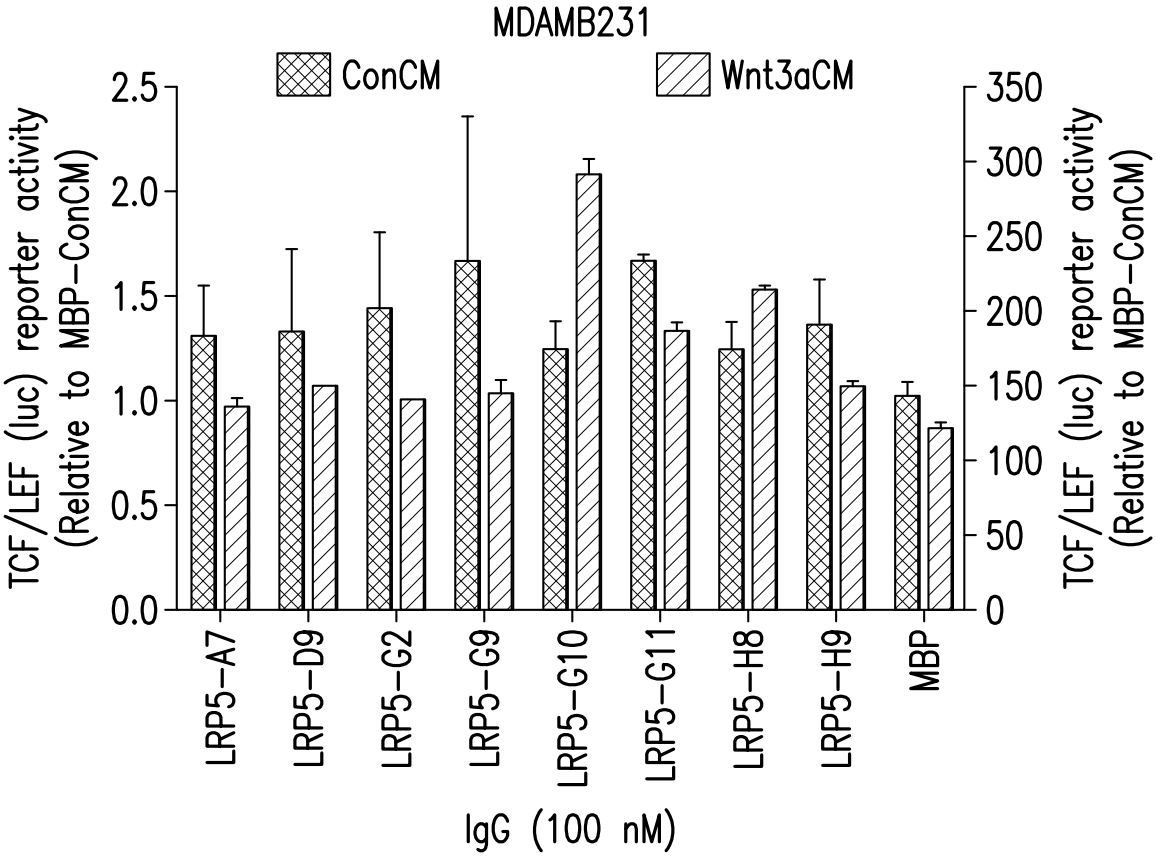

MDAMB231
ConCM
Wnt3aCM
TCF/LEF (luc) reporter activity
(Relative to MBP-ConCM)
2.5
2.0
1.5
1.0
0.5
0.0
350
300
250
200
150
100
50
0
LRP5-A7
LRP5-D9
LRP5-G2
LRP5-G9
LRP5-G10
LRP5-G11
LRP5-H8
LRP5-H9
MBP
IgG (100 nM)

FIG.3A

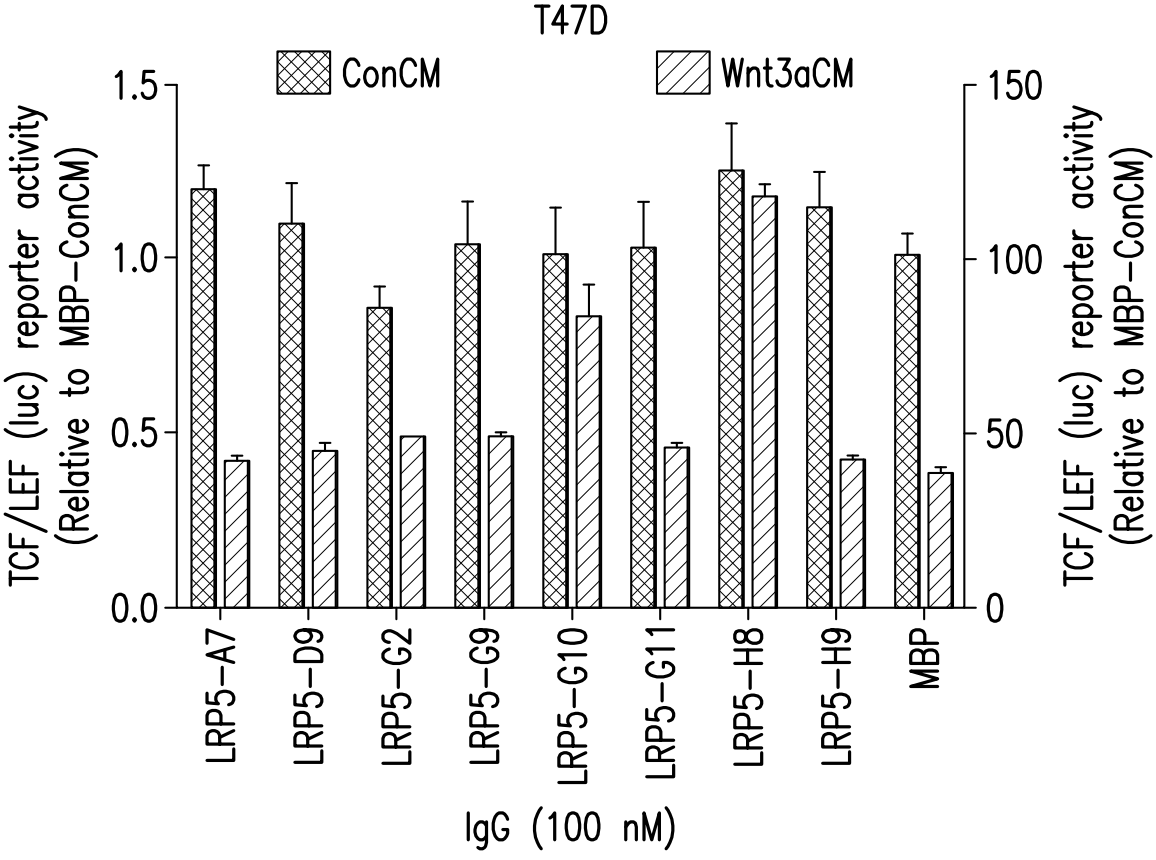

T47D
ConCM
Wnt3aCM
TCF/LEF (luc) reporter activity
(Relative to MBP-ConCM)
1.5
1.0
0.5
0.0
150
100
50
0
LRP5-A7
LRP5-D9
LRP5-G2
LRP5-G9
LRP5-G10
LRP5-G11
LRP5-H8
LRP5-H9
MBP
IgG (100 nM)

FIG.3B

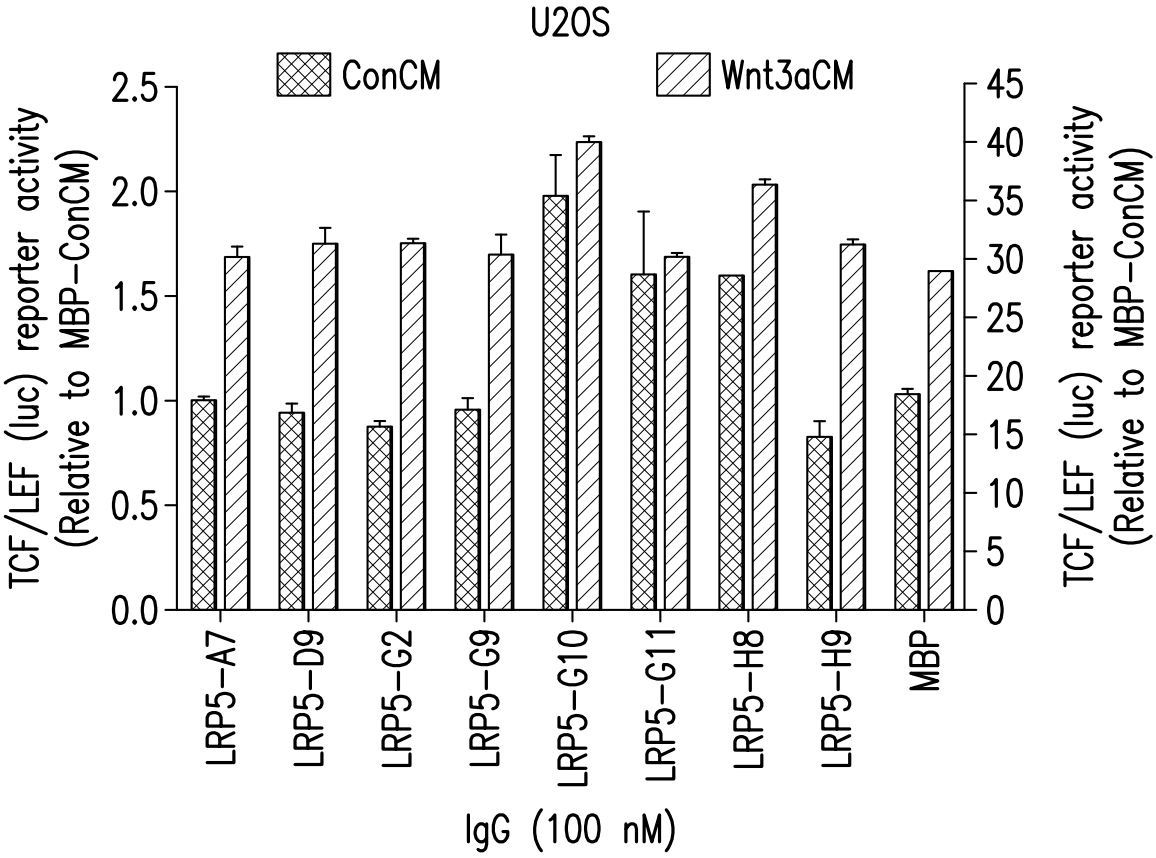

U2OS
ConCM
Wnt3aCM
TCF/LEF (luc) reporter activity
(Relative to MBP–ConCM)
2.5
2.0
1.5
1.0
0.5
0.0
45
40
35
30
25
20
15
10
5
0
LRP5–A7
LRP5–D9
LRP5–G2
LRP5–G9
LRP5–G10
LRP5–G11
LRP5–H8
LRP5–H9
MBP
IgG (100 nM)

FIG.3C

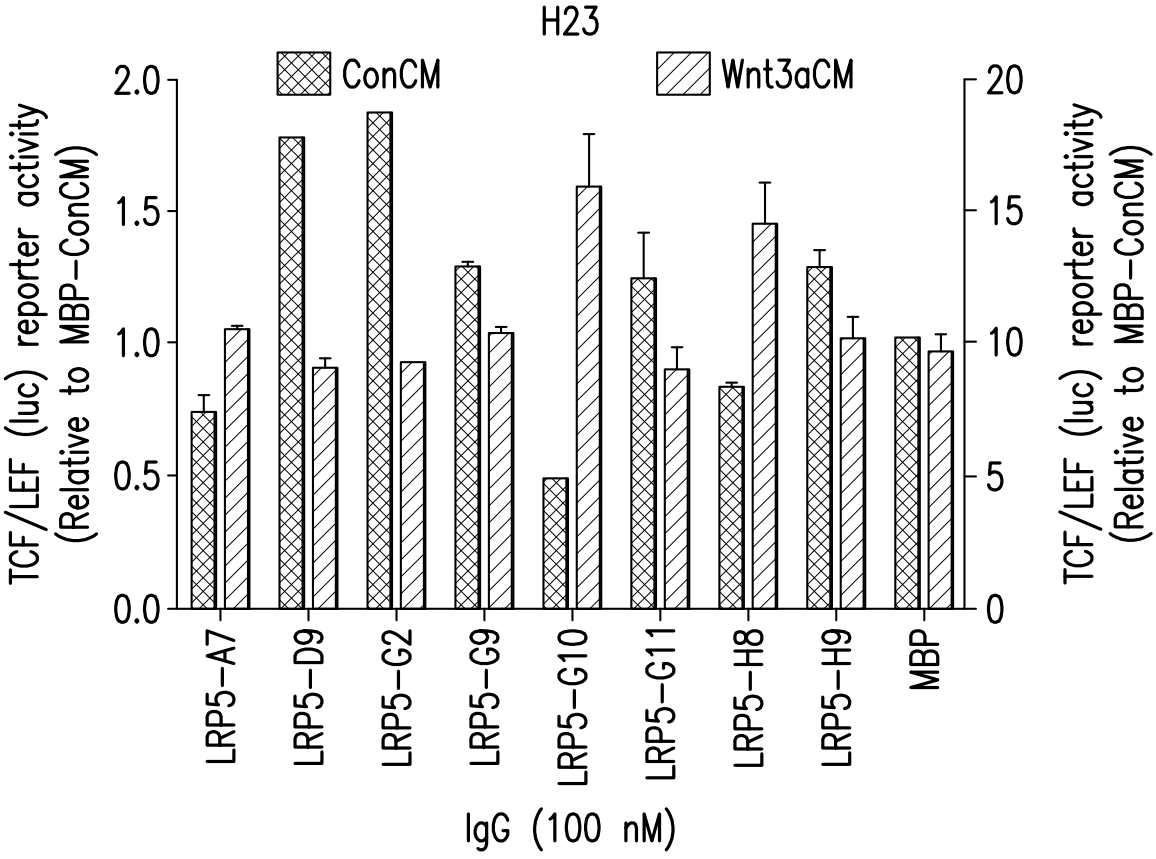
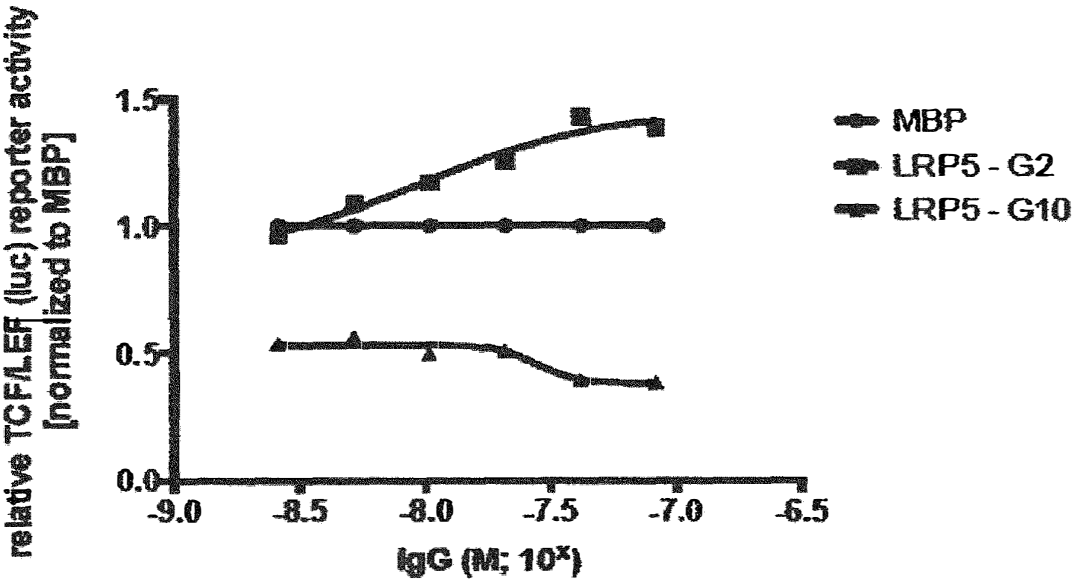

H23
ConCM
Wnt3aCM
TCF/LEF (luc) reporter activity
(Relative to MBP–ConCM)
2.0
1.5
1.0
0.5
0.0
20
15
10
5
0
LRP5–A7
LRP5–D9
LRP5–G2
LRP5–G9
LRP5–G10
LRP5–G11
LRP5–H8
LRP5–H9
MBP
IgG (100 nM)

FIG.3D

Figure 4

A


relative TCF/LEF (luc) reporter activity
[normalized to MBP]
1.5
1.0
0.5
0.0
-9.0
-8.5
-8.0
-7.5
-7.0
-6.5
IgG (M; 10x)
MBP
LRP5 - G2
LRP5 - G10

B

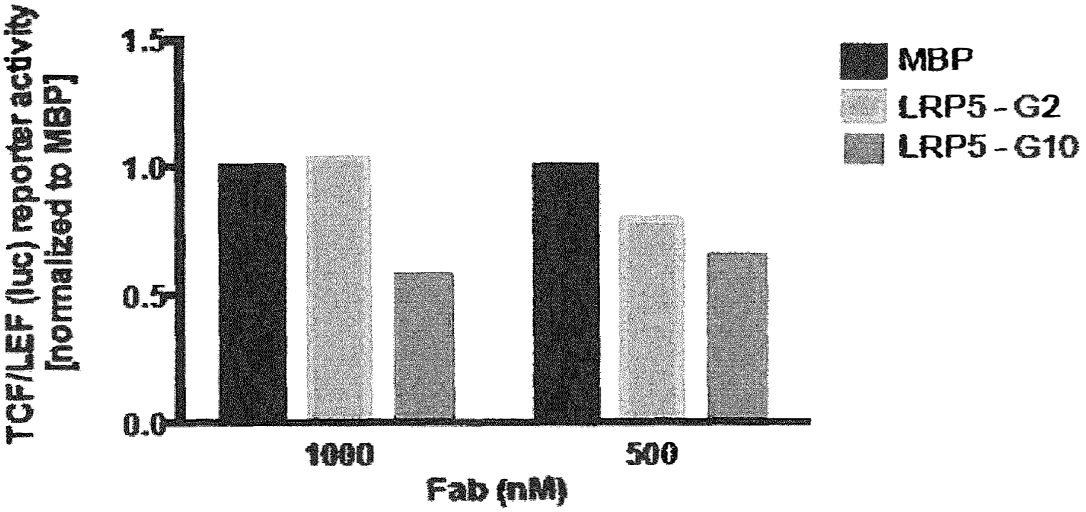
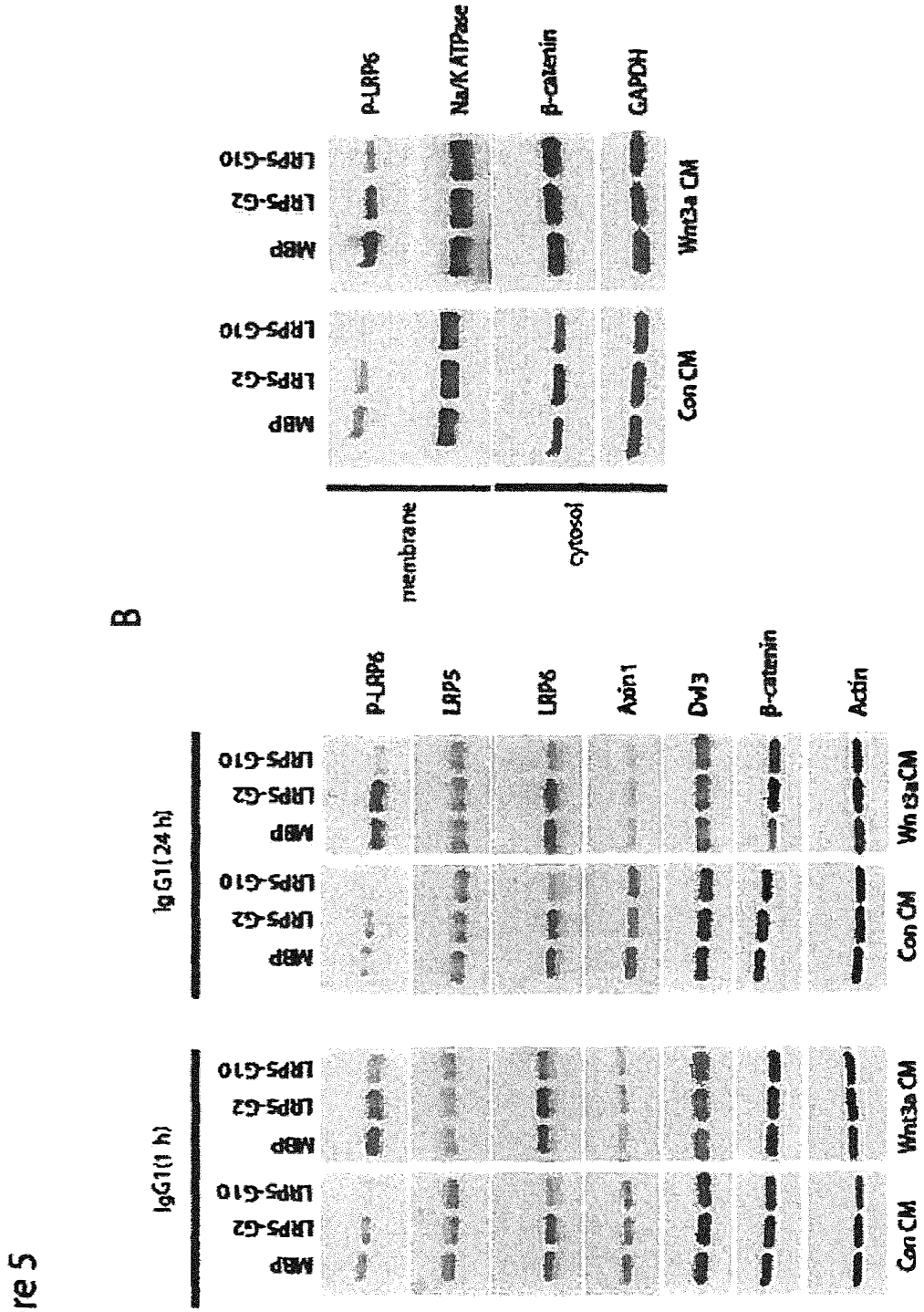

TCF/LEF (luc) reporter activity
[normalized to MBP]
1.5
1.0
0.5
0.0
1000
500
Fab (nM)
MBP
LRP5 - G2
LRP5 - G10

Figure 5


A
IgG1(1 h)
IgG1(24 h)
MBP
LRP5-G2
LRP5-G10
Con CM
Wnt3a CM
P-LRP6
LRP5
LRP6
Axin1
Dvl3
β-catenin
Actin
B
membrane
cytosol
P-LRP6
Na/K ATPase
β-catenin
GAPDH

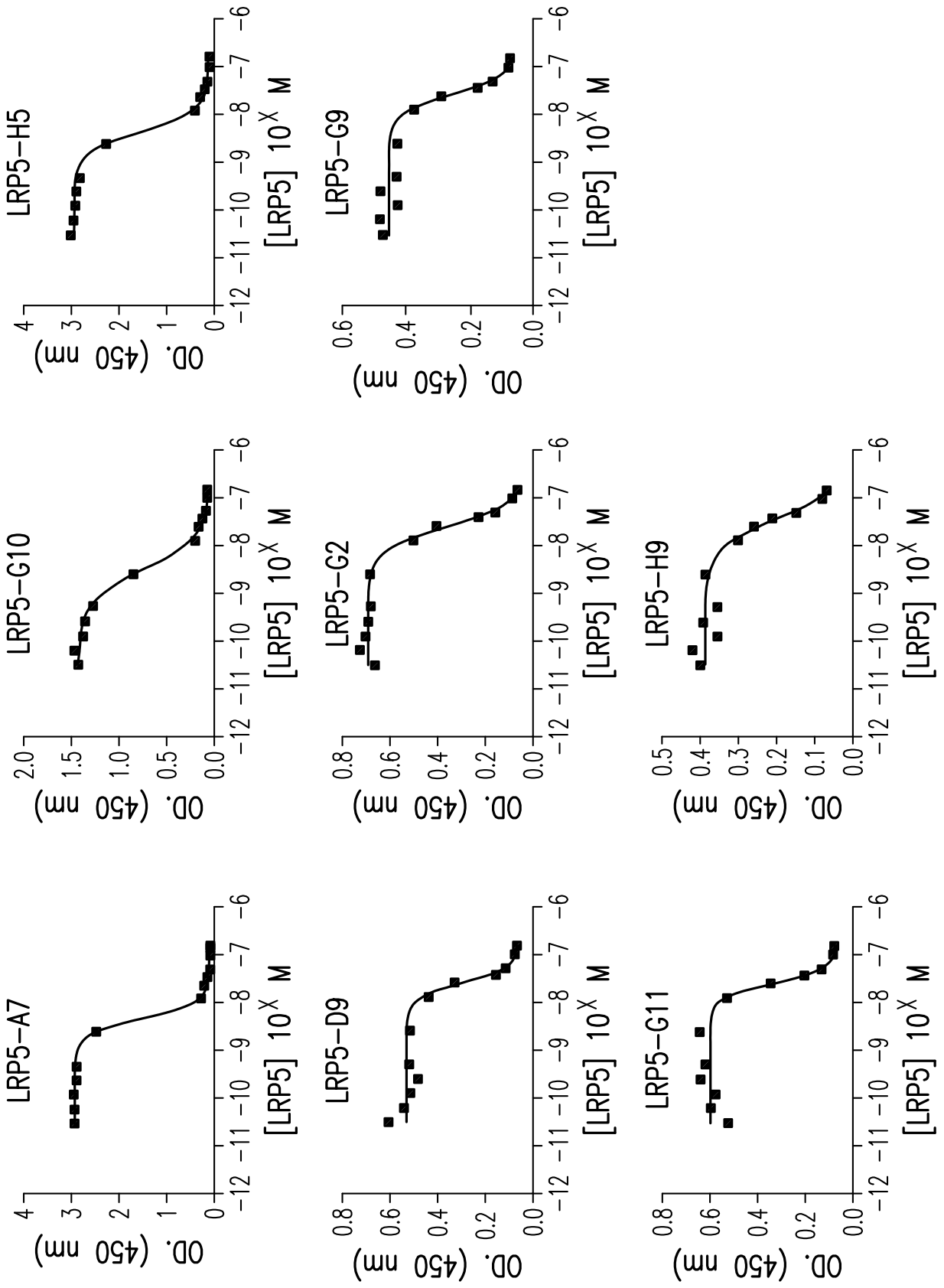

LRP5-A7
LRP5-G10
LRP5-H5
LRP5-D9
LRP5-G2
LRP5-G9
LRP5-G11
LRP5-H9
OD. (450 nm)
[LRP5] 10^X M

FIG.6

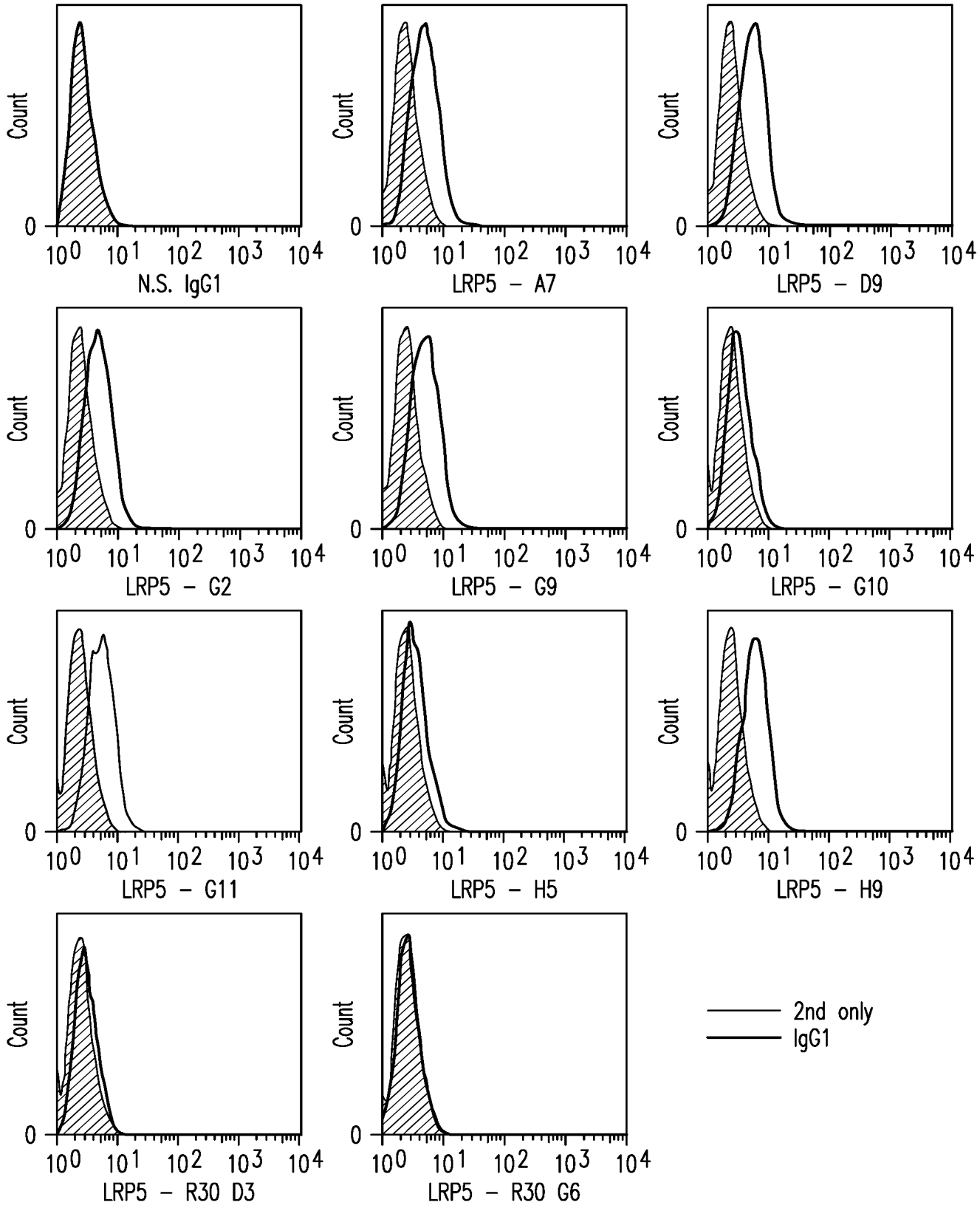

Count
0
10^0 10^1 10^2 10^3 10^4
N.S. IgG1
LRP5 – A7
LRP5 – D9
LRP5 – G2
LRP5 – G9
LRP5 – G10
LRP5 – G11
LRP5 – H5
LRP5 – H9
LRP5 – R30 D3
LRP5 – R30 G6
2nd only
IgG1

FIG. 7

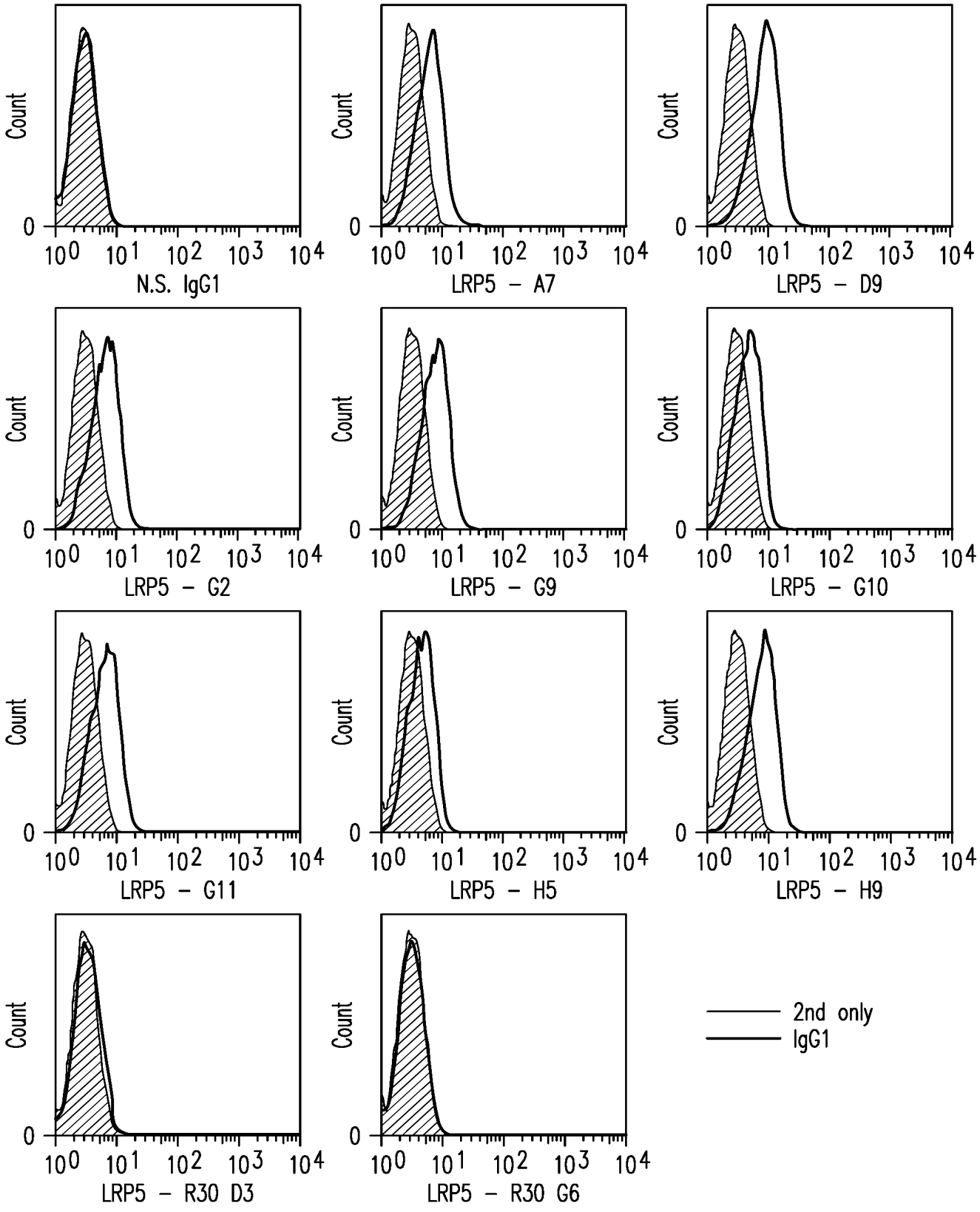

Count
0
10^0 10^1 10^2 10^3 10^4
N.S. IgG1
LRP5 – A7
LRP5 – D9
LRP5 – G2
LRP5 – G9
LRP5 – G10
LRP5 – G11
LRP5 – H5
LRP5 – H9
LRP5 – R30 D3
LRP5 – R30 G6
2nd only
IgG1

FIG.8

Figure 9 Wnt Signaling off Wnt Signaling on

