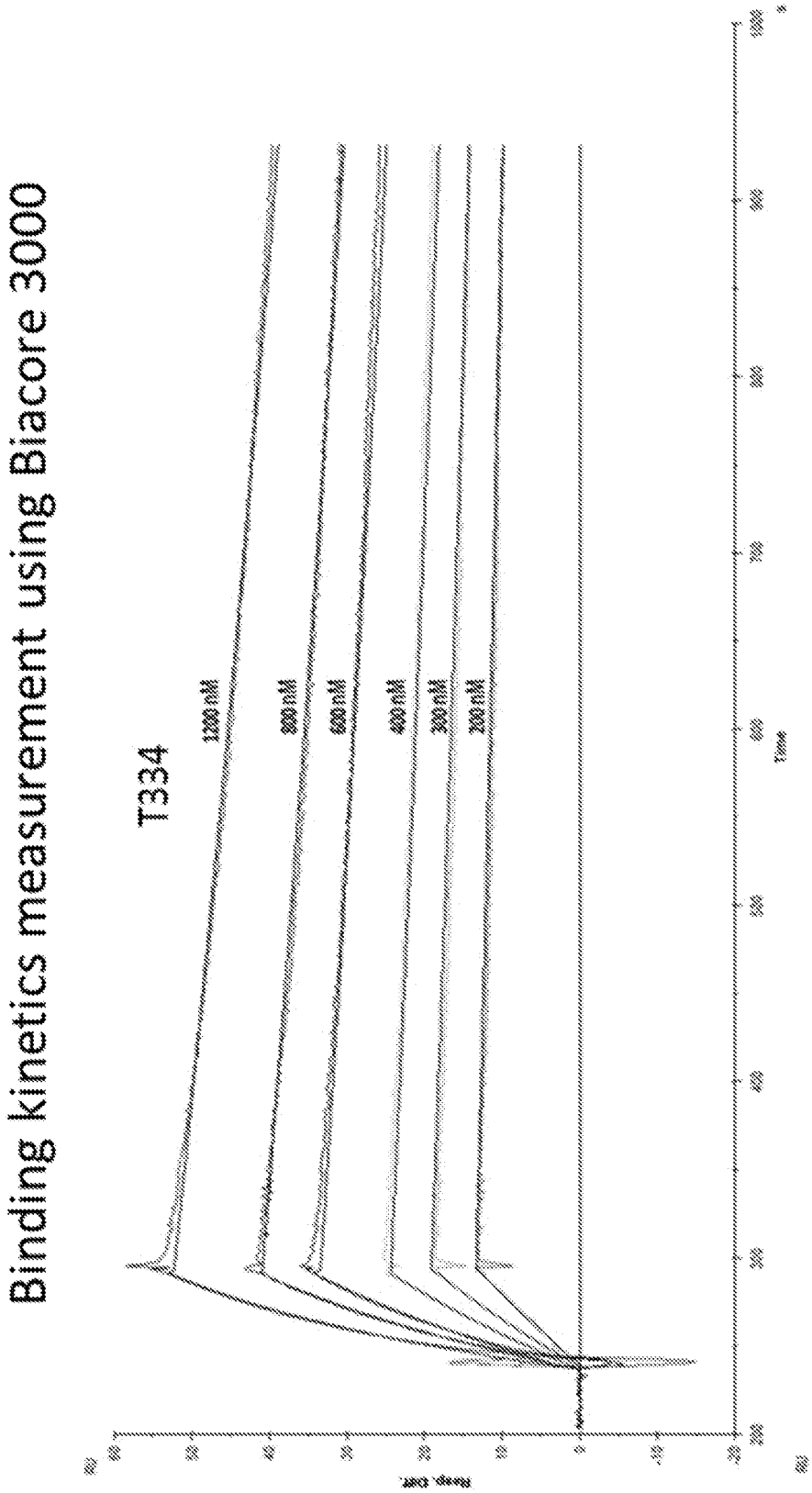
Binding kinetics measurement using Biacore 3000
T334
1200 nM
800 nM
600 nM
400 nM
300 nM
200 nM
Time

FIG. 1A

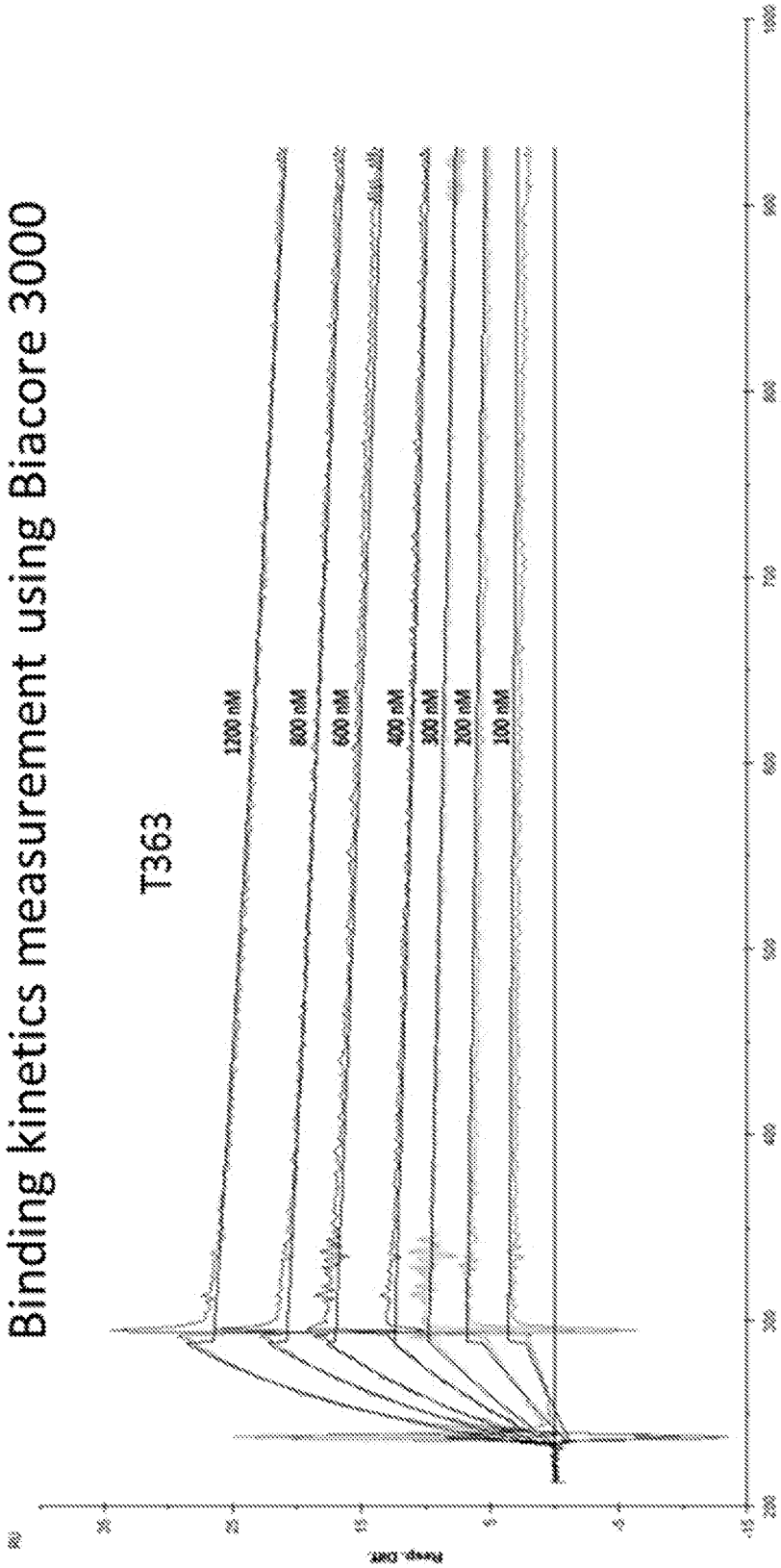
Binding kinetics measurement using Biacore 3000
T363
1200 nM
800 nM
600 nM
400 nM
300 nM
200 nM
100 nM

FIG. 1B

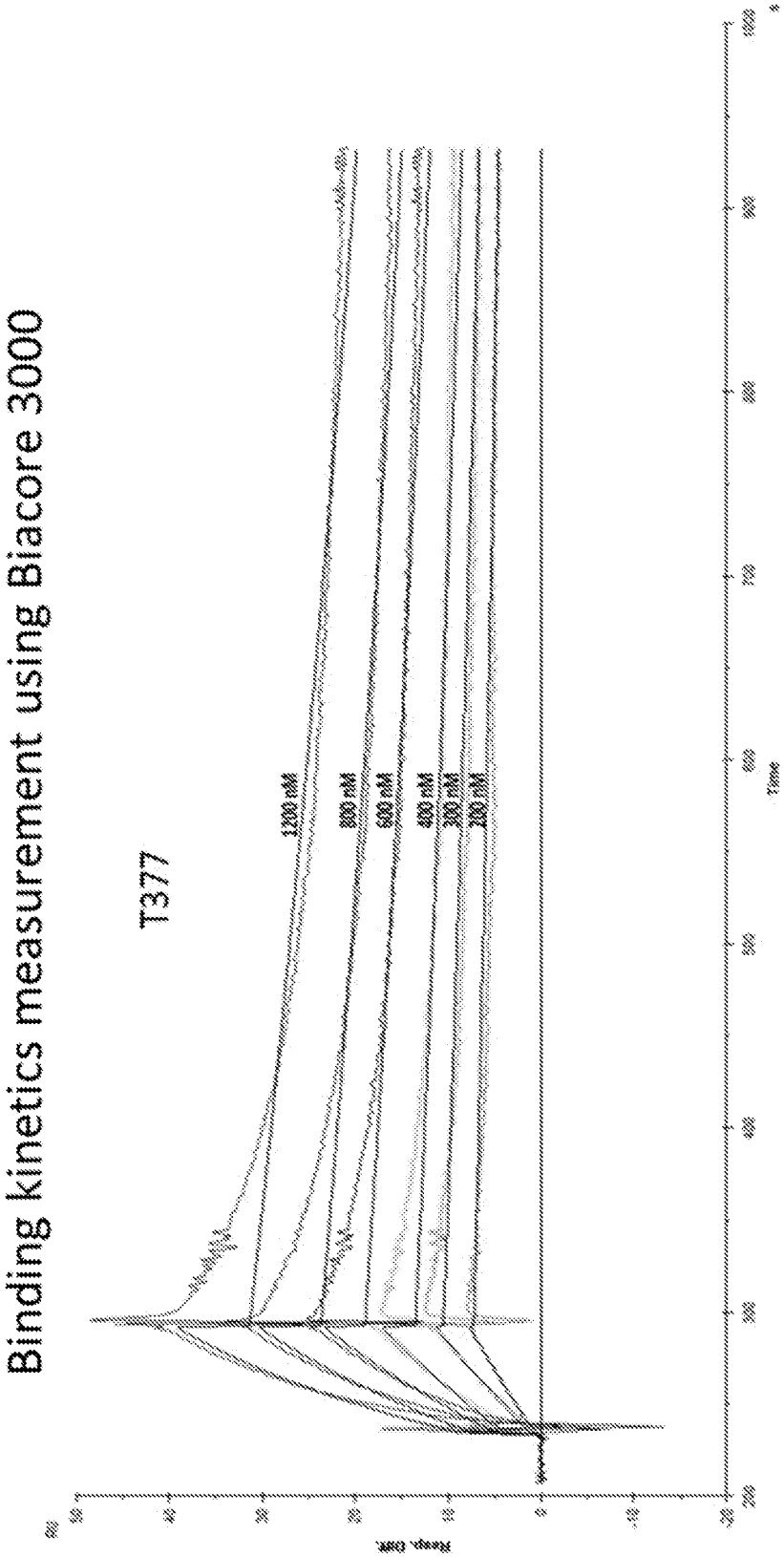
Binding kinetics measurement using Biacore 3000
T377
1200 nM
800 nM
600 nM
400 nM
300 nM
200 nM
Time
Response

FIG. 1C

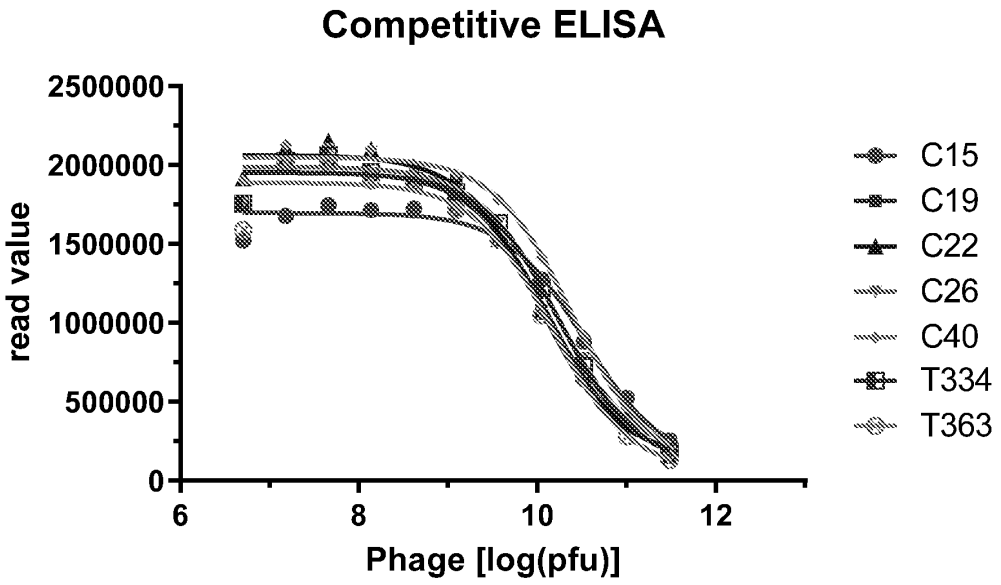
Competitive ELISA
read value
2500000
2000000
1500000
1000000
500000
0
6
8
10
12
Phage [log(pfu)]
C15
C19
C22
C26
C40
T334
T363

FIG. 2A

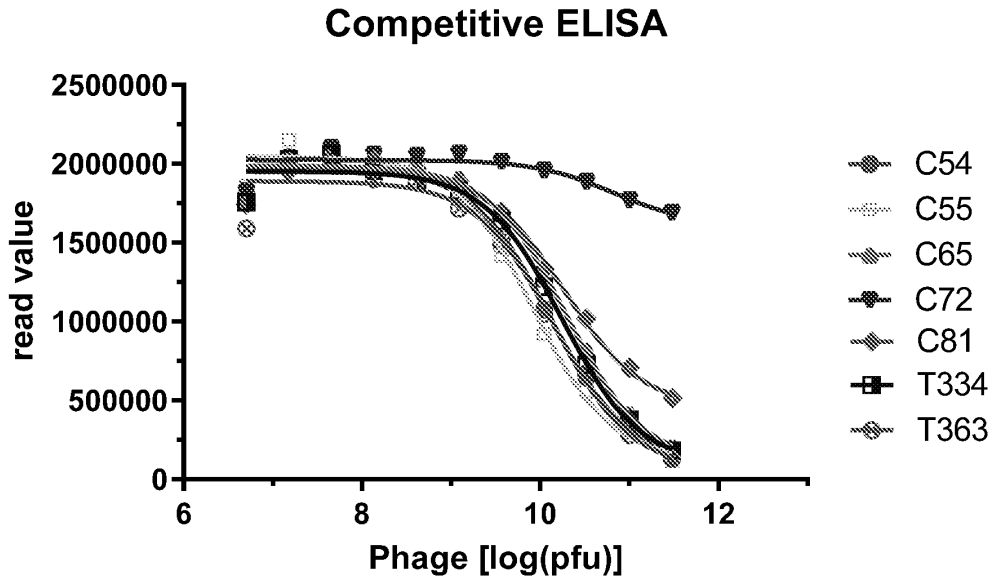
Competitive ELISA
read value
2500000
2000000
1500000
1000000
500000
0
6
8
10
12
Phage [log(pfu)]
C54
C55
C65
C72
C81
T334
T363

FIG. 2B

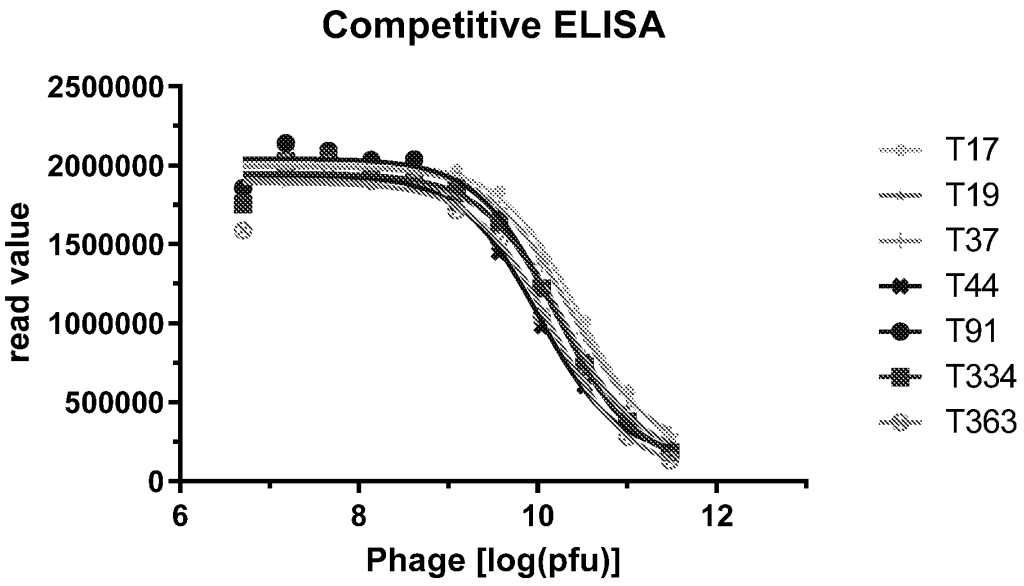
Competitive ELISA
read value
2500000
2000000
1500000
1000000
500000
0
6
8
10
12
Phage [log(pfu)]
T17
T19
T37
T44
T91
T334
T363

FIG. 2C

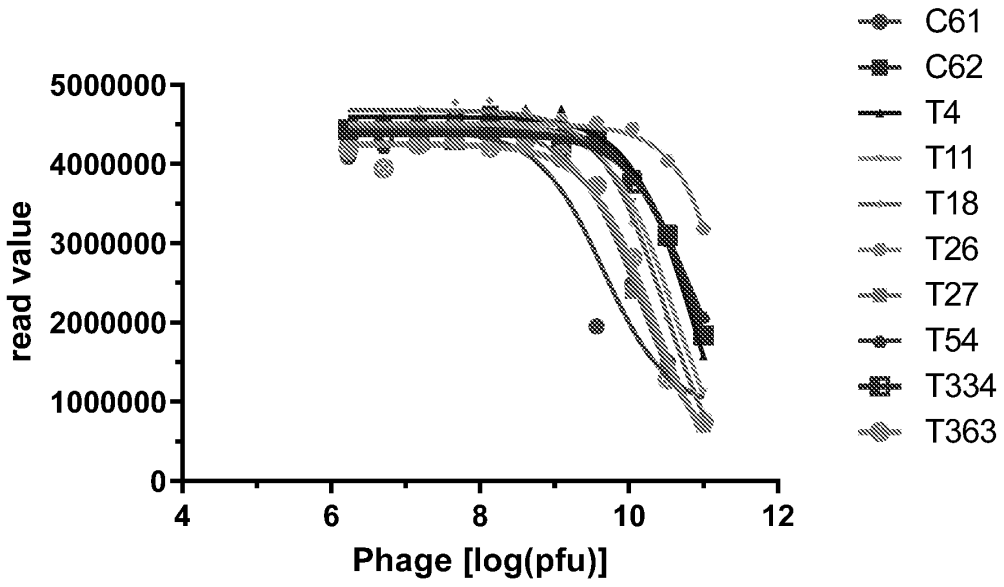
read value
5000000
4000000
3000000
2000000
1000000
0
4
6
8
10
12
Phage [log(pfu)]
C61
C62
T4
T11
T18
T26
T27
T54
T334
T363

FIG. 2D

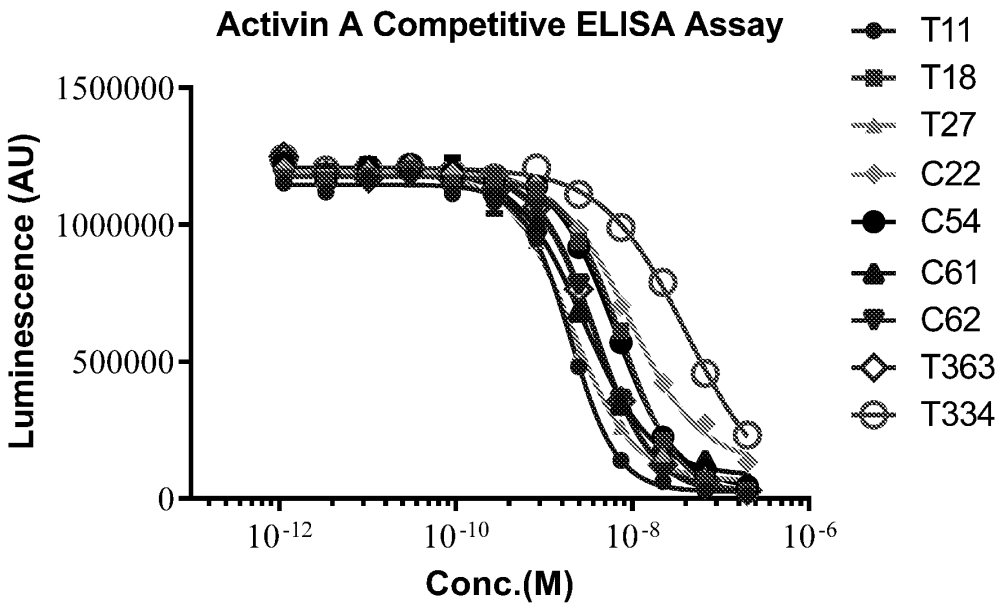
Activin A Competitive ELISA Assay
Luminescence (AU)
1500000
1000000
500000
0
10-12
10-10
10-8
10-6
Conc.(M)
T11
T18
T27
C22
C54
C61
C62
T363
T334

FIG. 2E

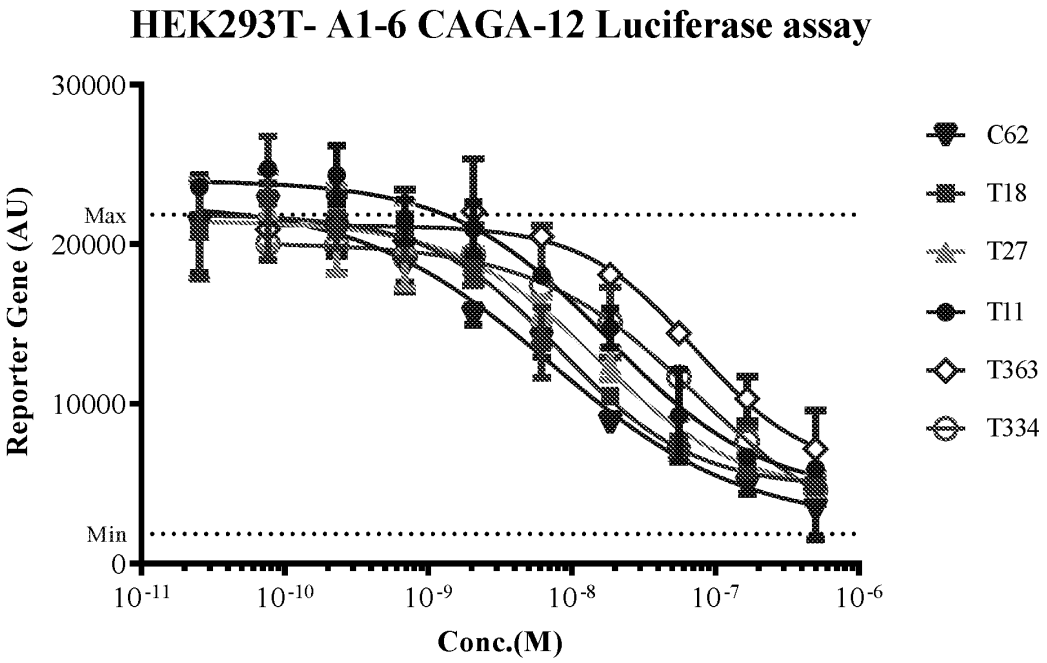
HEK293T- A1-6 CAGA-12 Luciferase assay
30000
Max
20000
10000
Min
0
Reporter Gene (AU)
10-11
10-10
10-9
10-8
10-7
10-6
Conc.(M)
C62
T18
T27
T11
T363
T334

FIG. 3

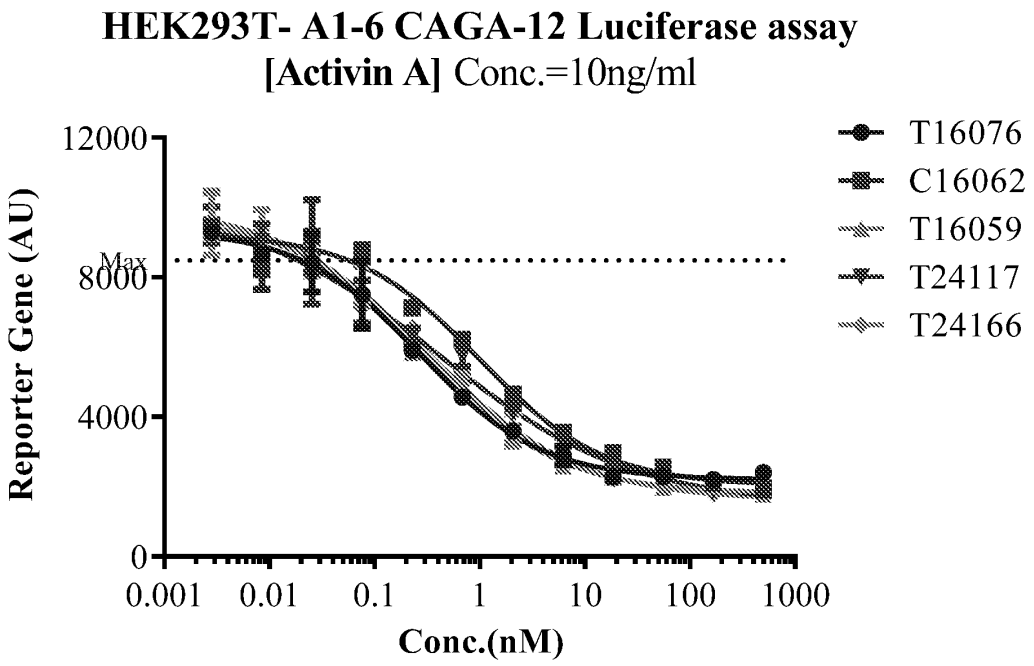
HEK293T- A1-6 CAGA-12 Luciferase assay
[Activin A] Conc.=10ng/ml
Reporter Gene (AU)
12000
Max
8000
4000
0
0.001
0.01
0.1
1
10
100
1000
Conc.(nM)
T16076
C16062
T16059
T24117
T24166

FIG. 4A

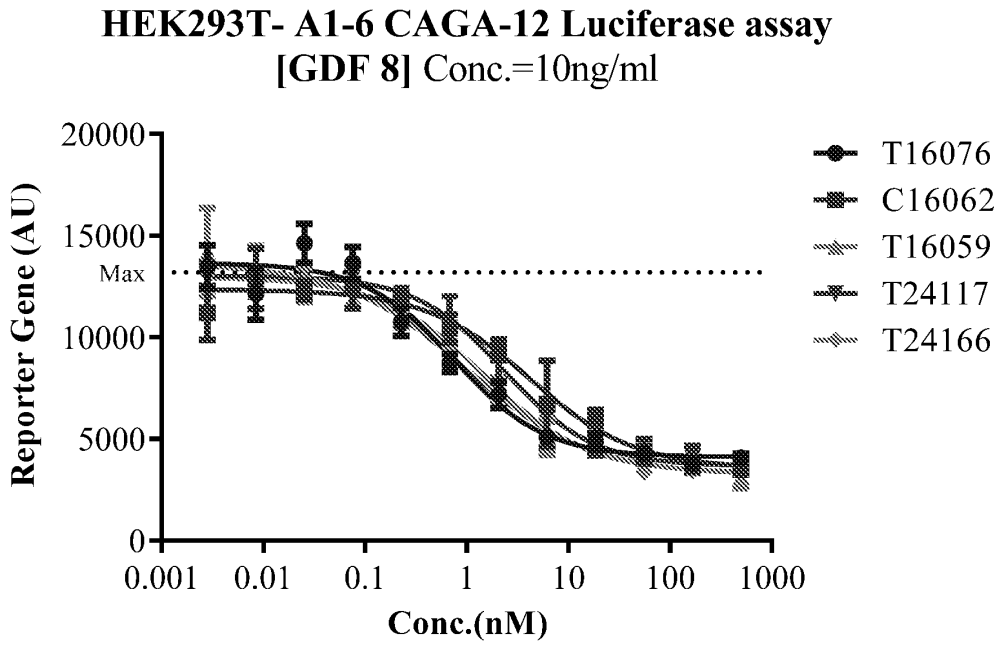
HEK293T- A1-6 CAGA-12 Luciferase assay
[GDF 8] Conc.=10ng/ml
Reporter Gene (AU)
20000
15000
Max
10000
5000
0
0.001
0.01
0.1
1
10
100
1000
Conc.(nM)
T16076
C16062
T16059
T24117
T24166

FIG. 4B

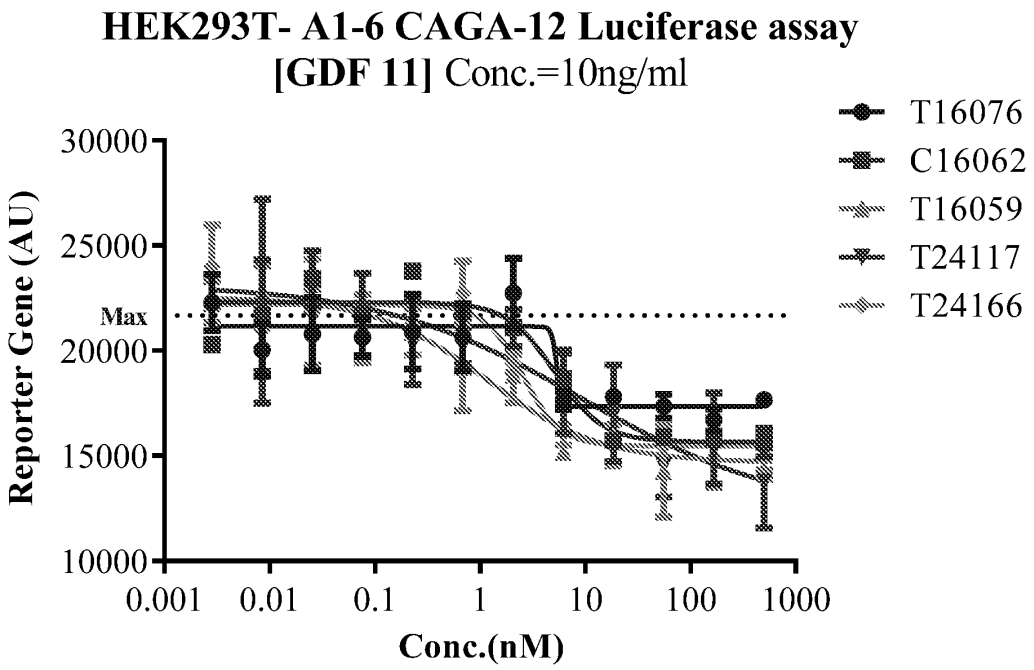
HEK293T- A1-6 CAGA-12 Luciferase assay
[GDF 11] Conc.=10ng/ml
T16076
C16062
T16059
T24117
T24166
Reporter Gene (AU)
30000
25000
Max
20000
15000
10000
0.001
0.01
0.1
1
10
100
1000
Conc.(nM)

FIG. 4C

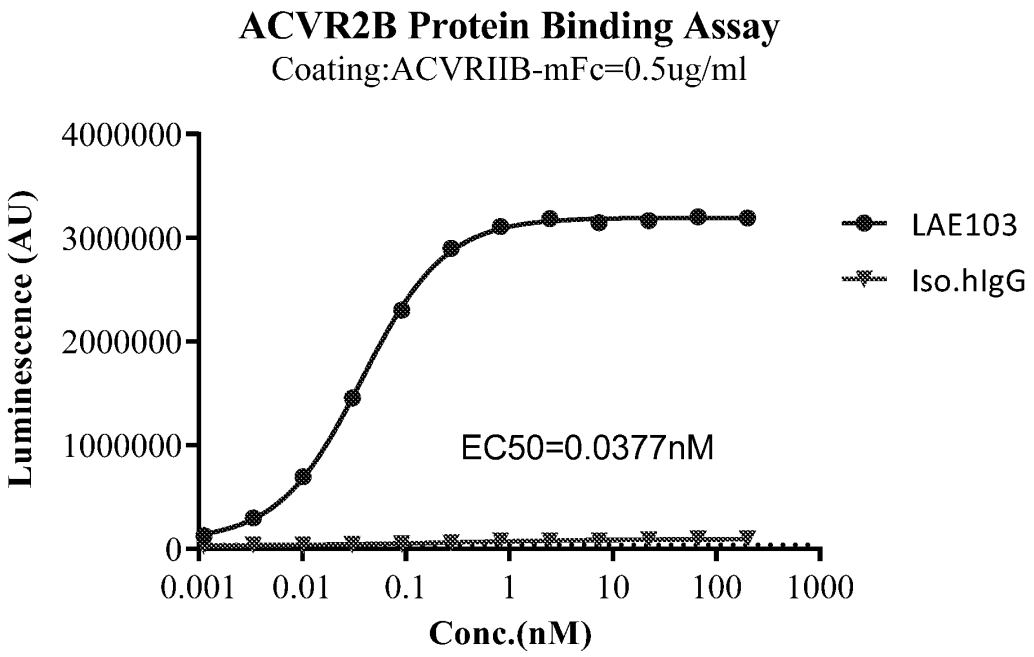
ACVR2B Protein Binding Assay
Coating:ACVRIIB-mFc=0.5ug/ml
Luminescence (AU)
4000000
3000000
2000000
1000000
0
0.001
0.01
0.1
1
10
100
1000
Conc.(nM)
LAE103
Iso.hIgG
EC50=0.0377nM

FIG. 5A

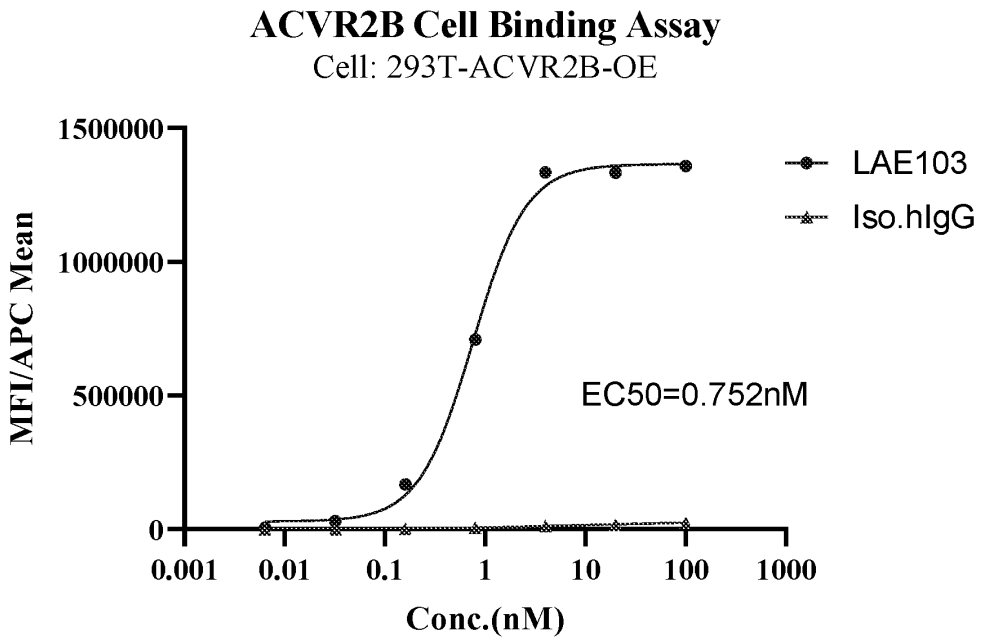
ACVR2B Cell Binding Assay
Cell: 293T-ACVR2B-OE
MFI/APC Mean
1500000
1000000
500000
0
0.001
0.01
0.1
1
10
100
1000
Conc.(nM)
LAE103
Iso.hIgG
EC50=0.752nM

FIG. 5B

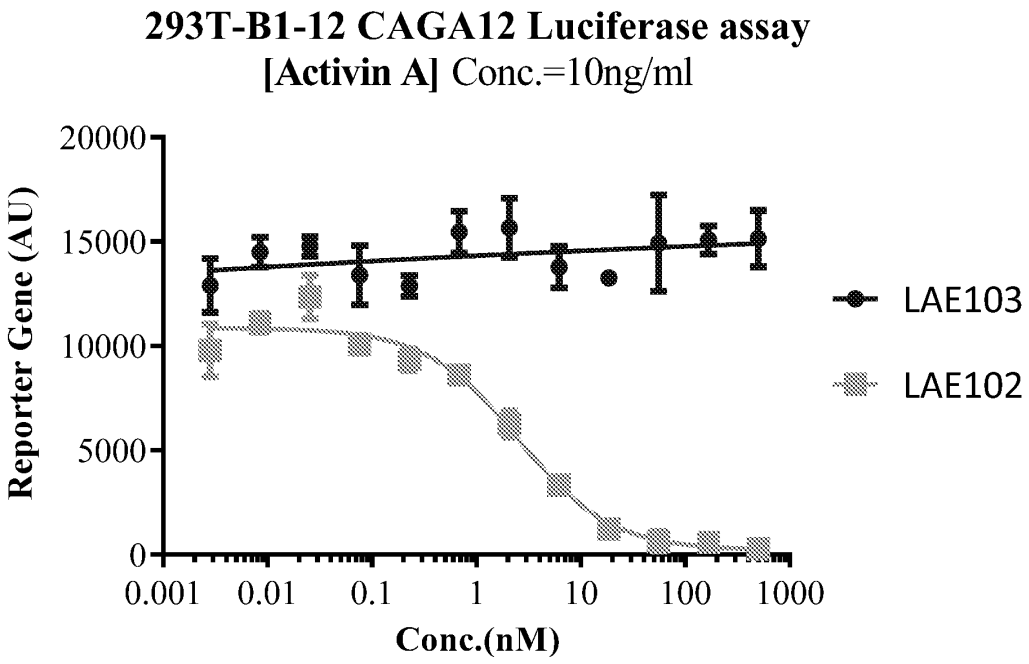
293T-B1-12 CAGA12 Luciferase assay
[Activin A] Conc.=10ng/ml
Reporter Gene (AU)
20000
15000
10000
5000
0
0.001
0.01
0.1
1
10
100
1000
Conc.(nM)
LAE103
LAE102

FIG. 6A

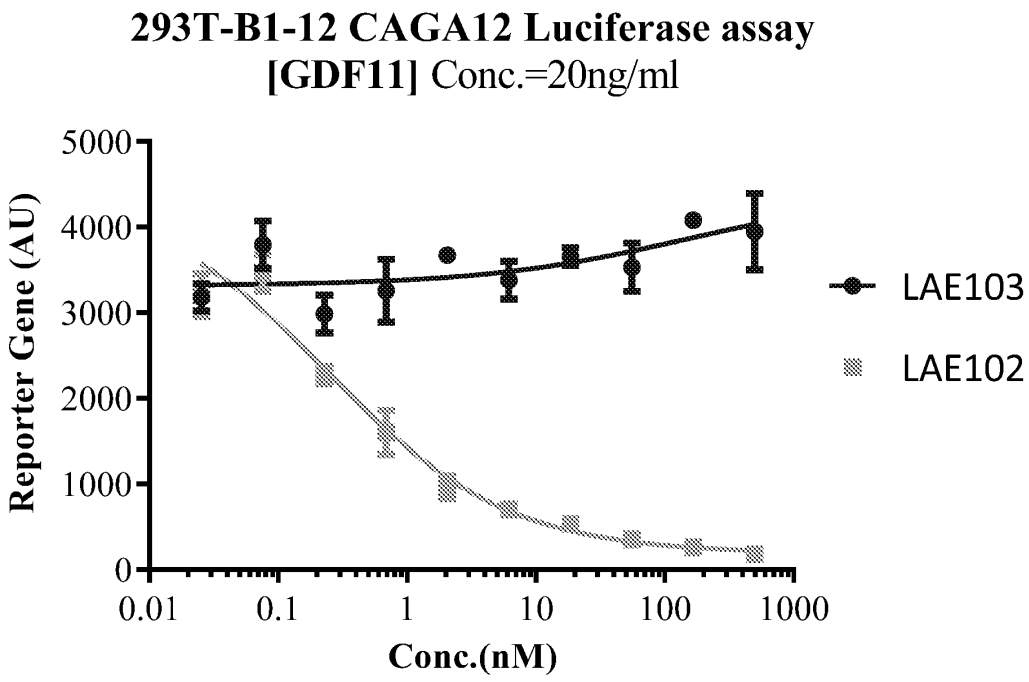
293T-B1-12 CAGA12 Luciferase assay
[GDF11] Conc.=20ng/ml
Reporter Gene (AU)
5000
4000
3000
2000
1000
0
0.01
0.1
1
10
100
1000
Conc.(nM)
LAE103
LAE102

FIG. 6B

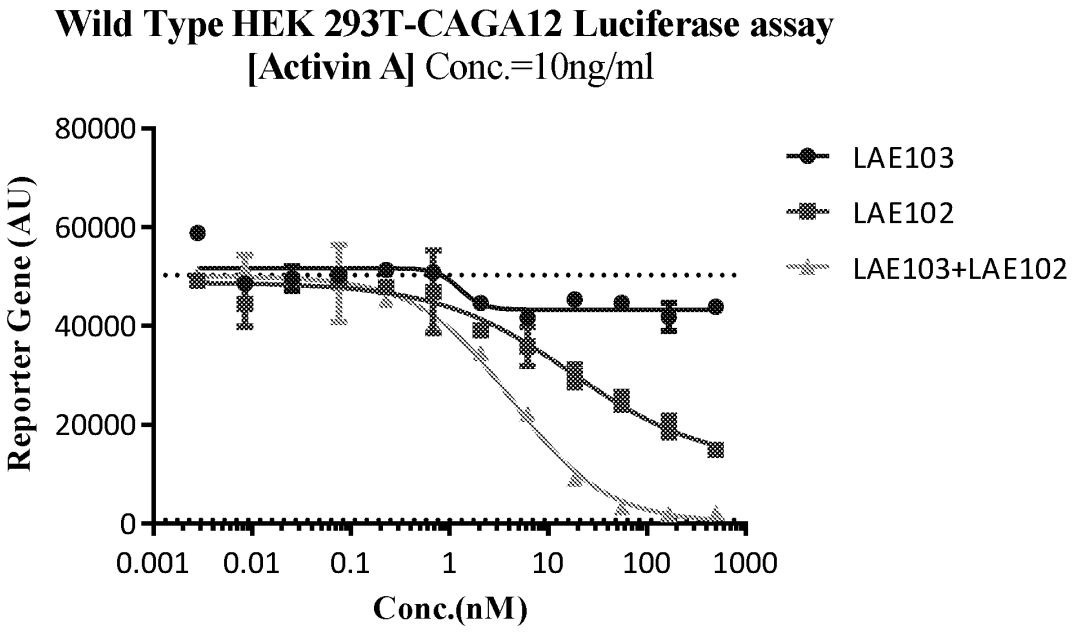
Wild Type HEK 293T-CAGA12 Luciferase assay
[Activin A] Conc.=10ng/ml
Reporter Gene (AU)
80000
60000
40000
20000
0
0.001
0.01
0.1
1
10
100
1000
Conc.(nM)
LAE103
LAE102
LAE103+LAE102

FIG. 7

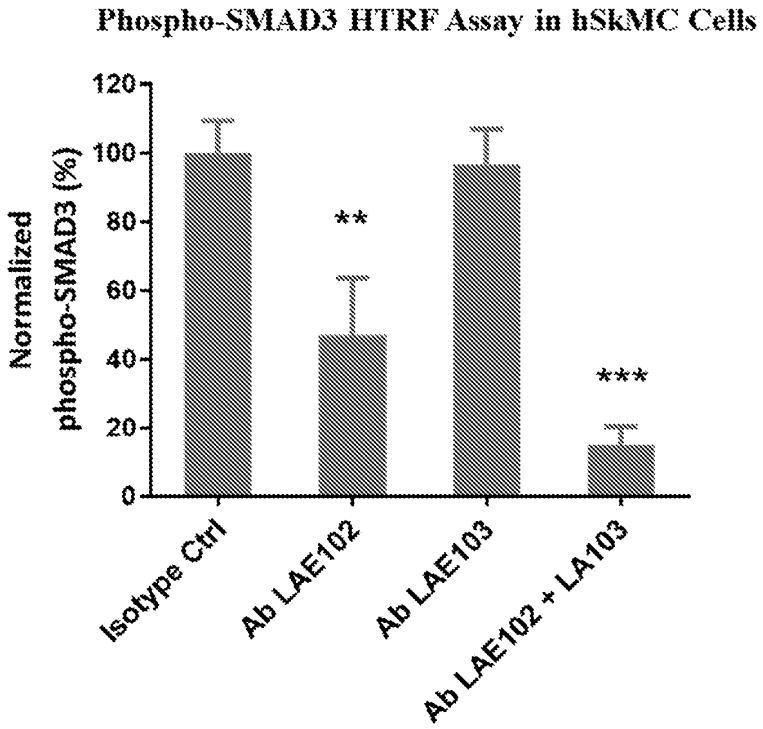
Phospho-SMAD3 HTRF Assay in hSkMC Cells
Normalized phospho-SMAD3 (%)
120
100
80
60
40
20
0
**
***
Isotype Ctrl
Ab LAE102
Ab LAE103
Ab LAE102 + LA103

FIG. 8