*Fig. 1*

**Amino acid sequences and numbering of human germline antibody frameworks used in the library**

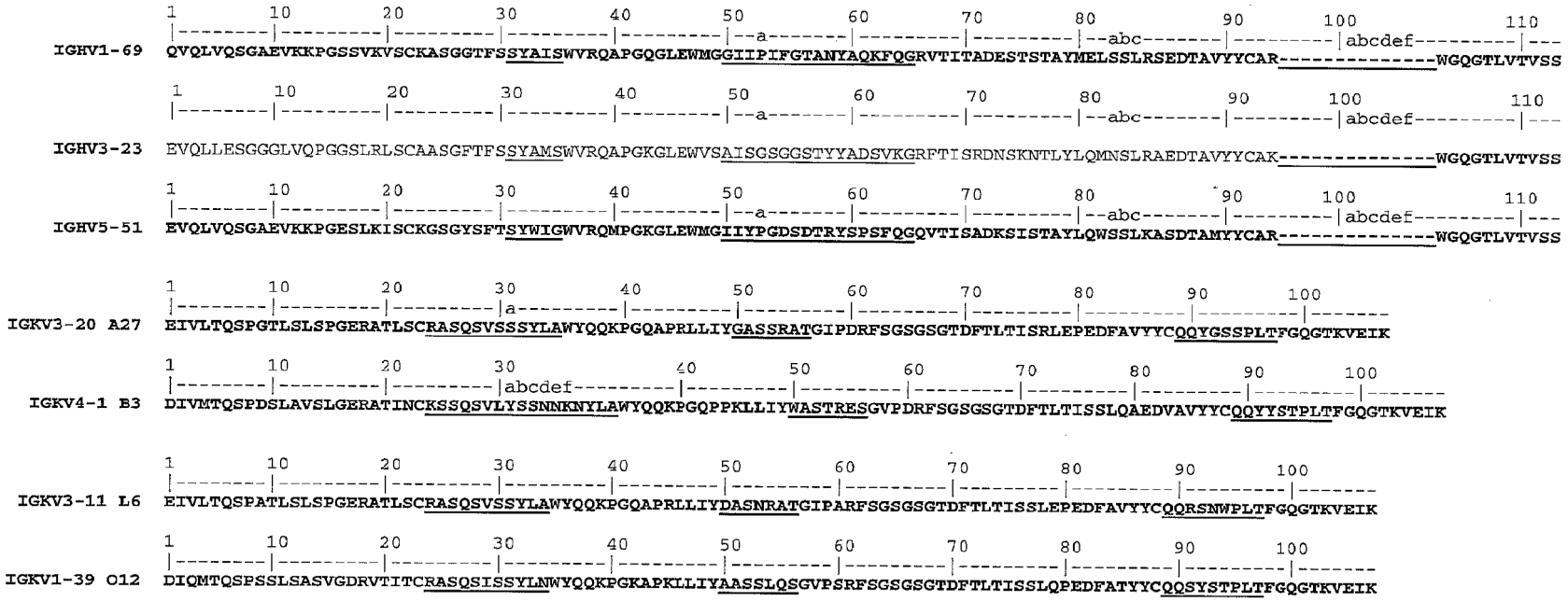


*FIG. 2A*

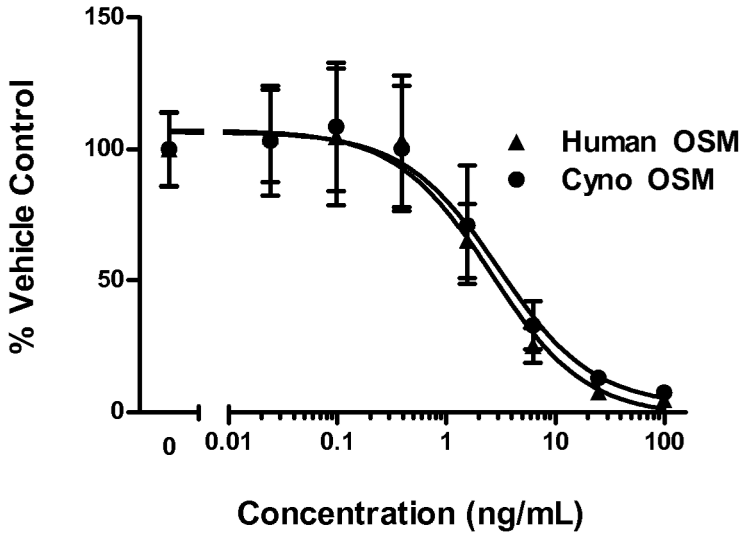

150
100
50
0
% Vehicle Control
Human OSM
Cyno OSM
0
0.01
0.1
1
10
100
Concentration (ng/mL)

*FIG. 2B*

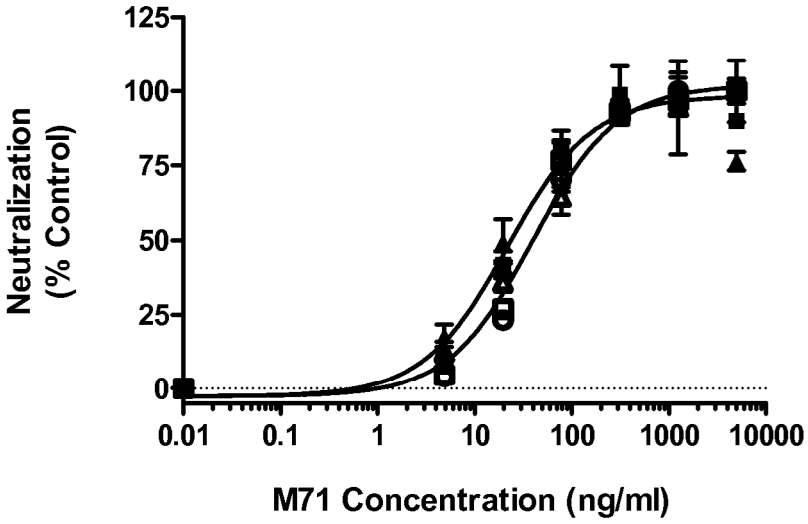

125
100
75
50
25
0
Neutralization
(% Control)
0.01
0.1
1
10
100
1000
10000
M71 Concentration (ng/ml)

***Fig. 3***

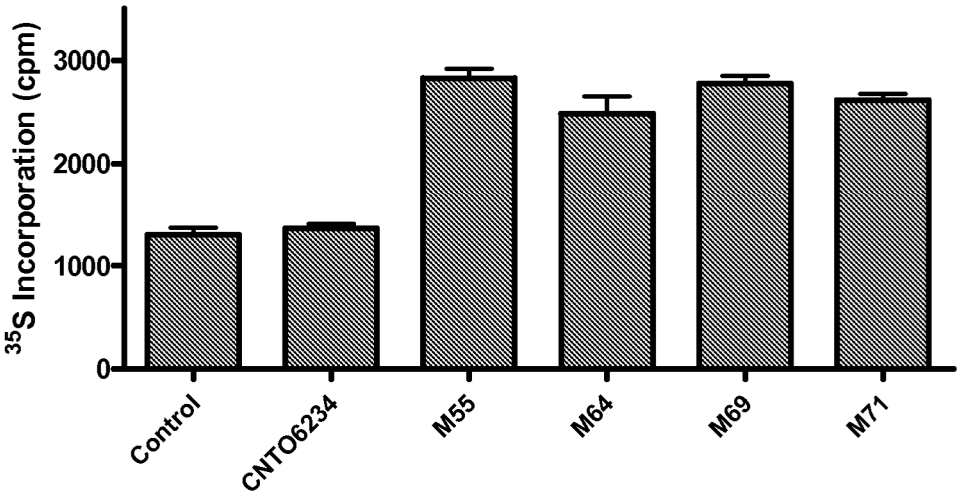

$^{35}$S Incorporation (cpm)
3000
2000
1000
0
Control
CNTO6234
M55
M64
M69
M71

*Fig. 4A*

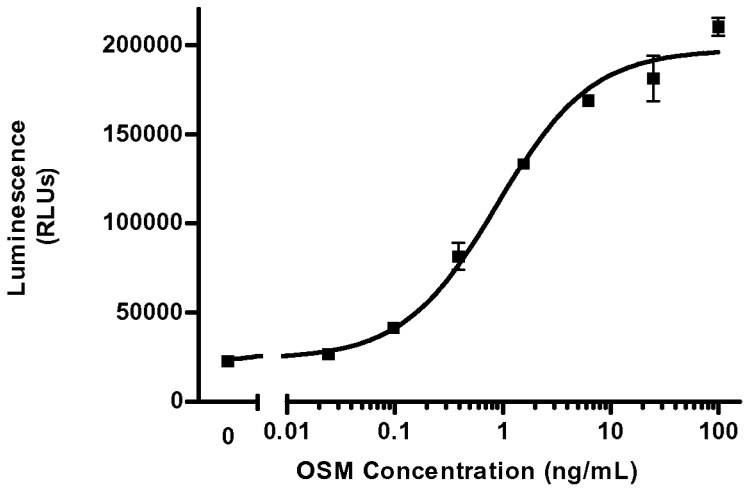

Luminescence (RLUs)
200000
150000
100000
50000
0
0
0.01
0.1
1
10
100
OSM Concentration (ng/mL)

*Fig. 4B*

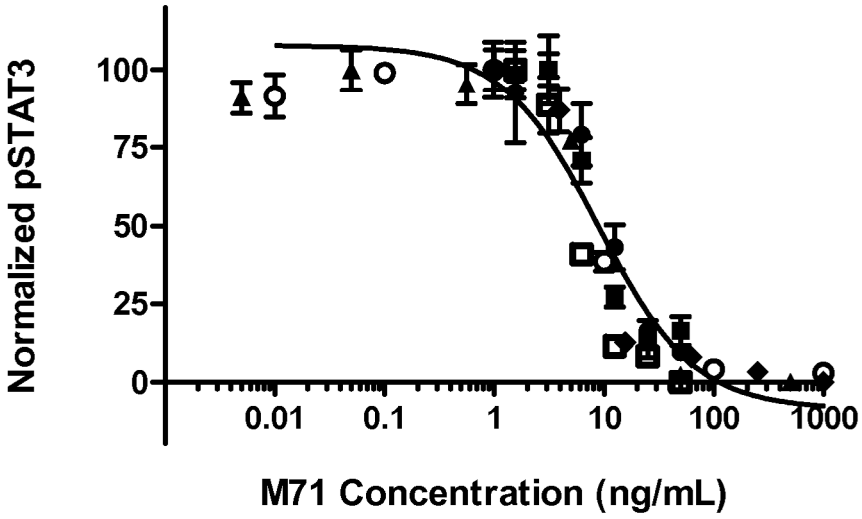

Normalized pSTAT3
100
75
50
25
0
0.01
0.1
1
10
100
1000
M71 Concentration (ng/mL)

*Fig. 5A*

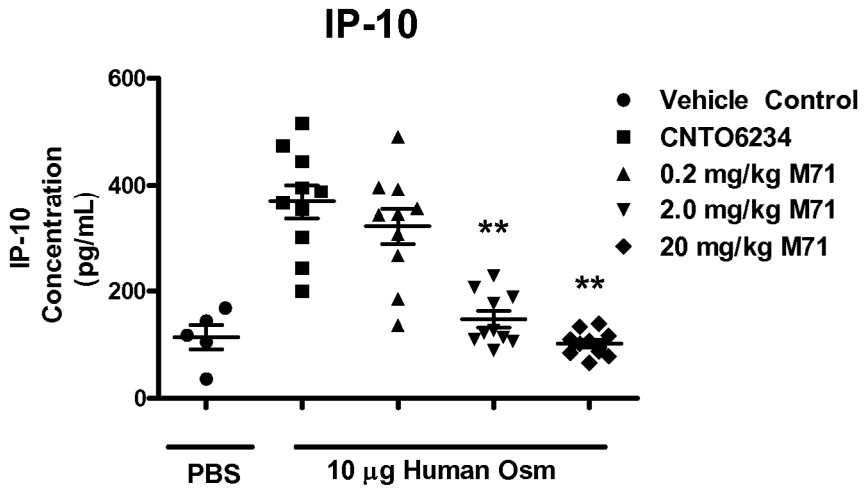

IP-10
IP-10 Concentration (pg/mL)
600
400
200
0
**
**
Vehicle Control
CNTO6234
0.2 mg/kg M71
2.0 mg/kg M71
20 mg/kg M71
PBS
10 μg Human Osm

*Fig. 5B*

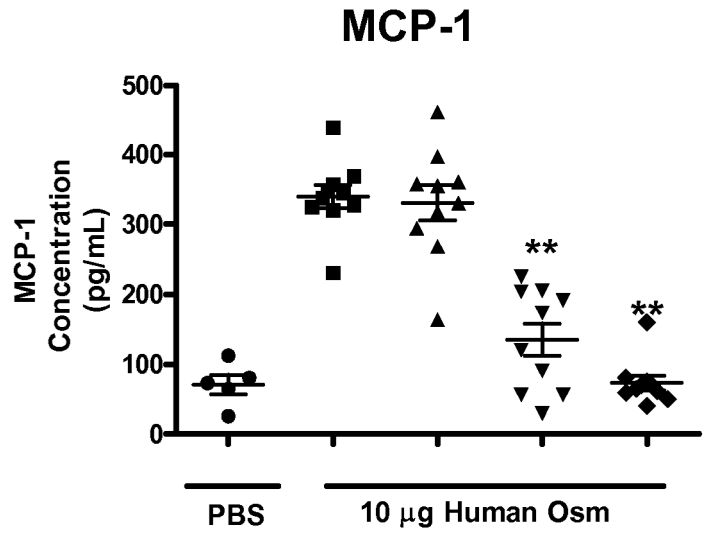

MCP-1
MCP-1 Concentration (pg/mL)
500
400
300
200
100
0
**
**
PBS
10 μg Human Osm

*Fig. 6A*

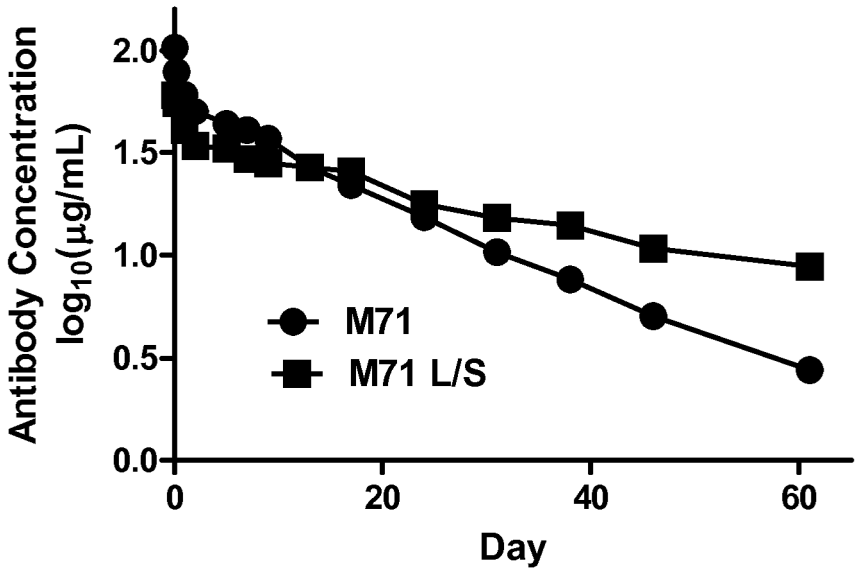
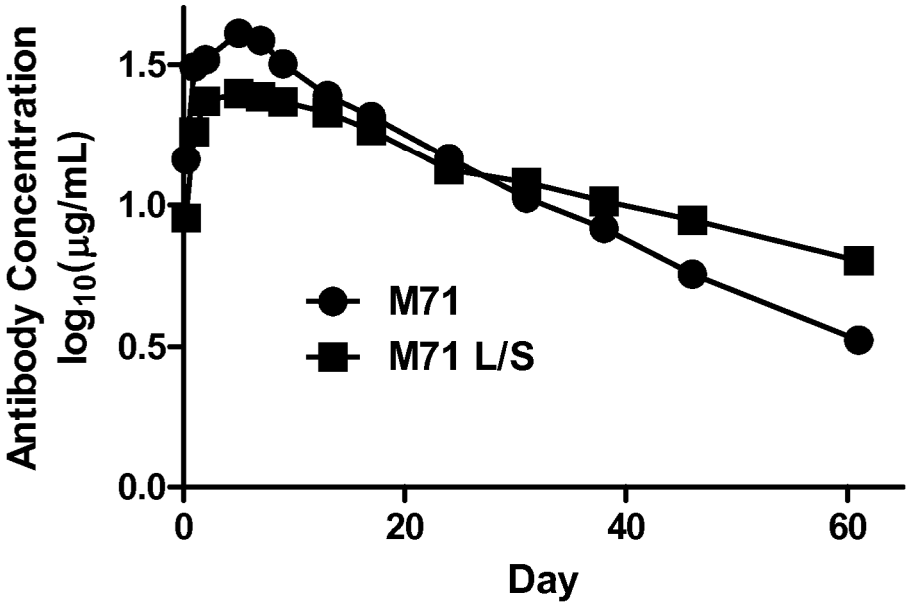

Antibody Concentration
log10(μg/mL)
2.0
1.5
1.0
0.5
0.0
0
20
40
60
Day
M71
M71 L/S

*Fig. 6B*


Antibody Concentration
log10(μg/mL)
1.5
1.0
0.5
0.0
0
20
40
60
Day
M71
M71 L/S