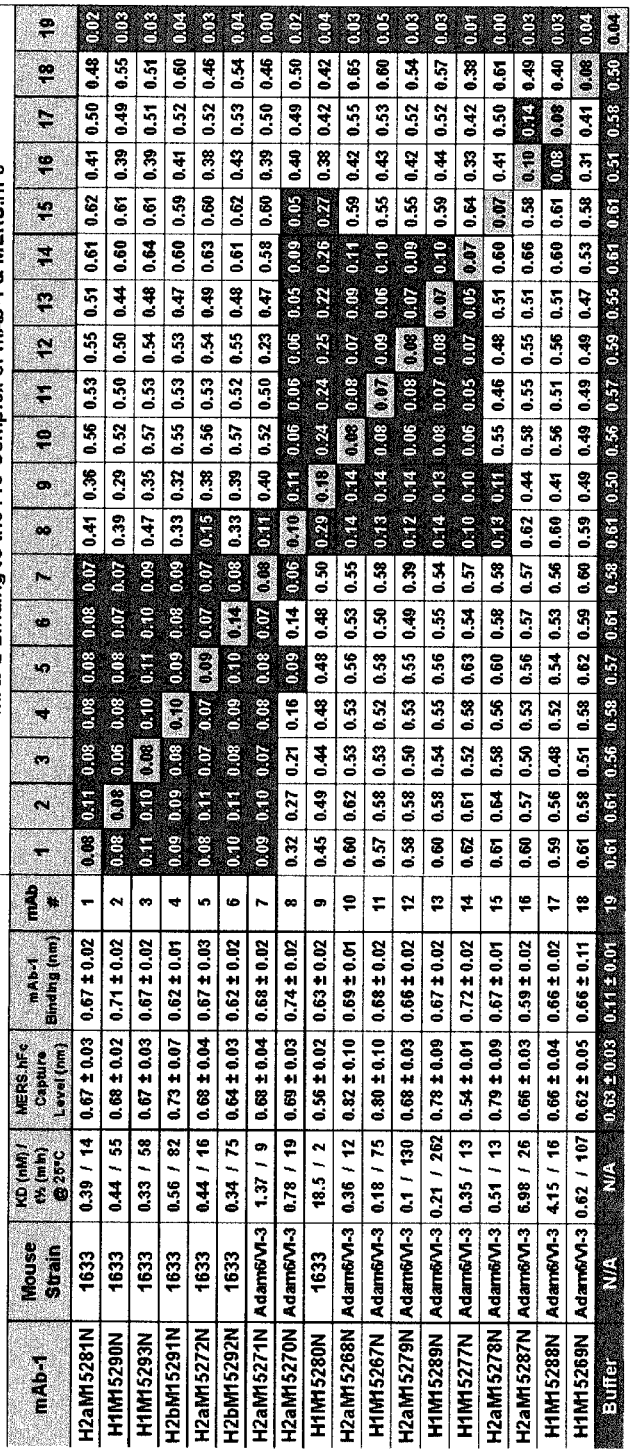
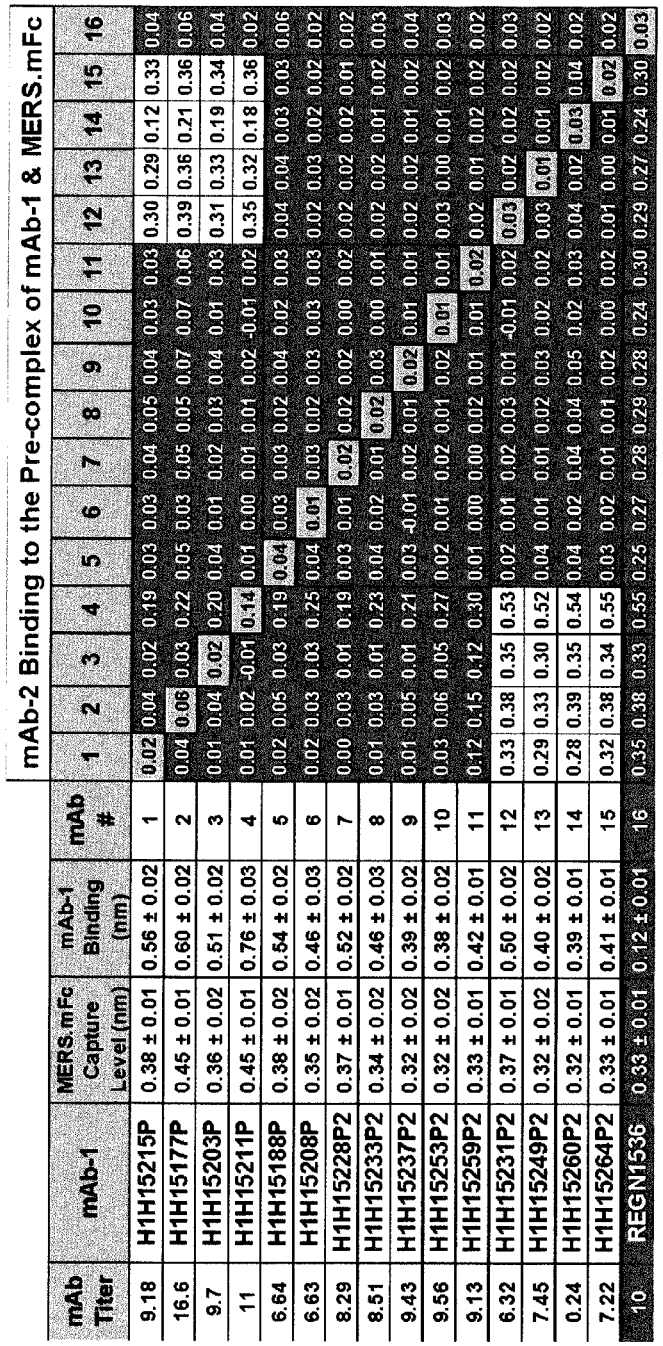
Sample ID	ELISA Binding	ELISA Blocking	% Neutralization (.025 µg/ml)	Neutralization IC50 (M)	KD (M)	t½ (min)
HBVX06H05	2.676	99.7	99%	1.328E-10	1.72E-09	11.1
HBVX11H04	2.623	99.7	99%	1.492E-10	3.28E-10	94.1
HBVX11D02	2.420	97.8	98%	2.108E-10	2.05E-09	13.5
HBVZ10E10	2.537	90.8	98%	4.636E-10	2.77E-09	10.4
HBVY09F08	2.044	99.3	98%	3.245E-10	1.79E-09	17.3
HBVZ05G02	2.515	92.7	97%	2.212E-10	2.72E-09	9.5
HBVZ09B06	2.751	100.2	97%	1.759E-10	6.53E-09	7.4
HBVY01F08	2.182	99.0	97%	1.377E-10	2.66E-10	96.0
HBVY10G02	2.587	100.1	97%	2.737E-10	3.73E-09	7.7
HBVY04B06	2.463	100.1	96%	6.845E-11	1.51E-09	13.3
HBVY07D10	2.417	25.9	40%	1.02E-09	9.39E-09	29.5
HBVZ08A09	2.782	100.1	91%	3.567E-10	5.93E-10	67.8
HBVZ05G04	2.675	99.8	90%	3.054E-10	4.77E-10	≥ 115
HBVY06C07	2.508	90.9	89%	5.56E-10	3.94E-10	≥ 115
HBVY03H06	2.735	97.6	89%	4.253E-10	6.69E-10	≥ 115
HBVZ10G06	2.383	98.7	86%	4.357E-10	4.72E-10	≥ 115
HBVZ04F10	2.756	96.3	83%	5.843E-10	7.78E-10	80.7
HBVX11E09	2.533	100.3	5%	3.587E-09	2.45E-10	≥ 115
HBVY06H09	2.806	7.4	2%	-	7.12E-09	18.8
HBVZ05B11	2.677	2.6	-6%	-	2.97E-09	94.8
HBVY02E05	2.644	74.4	-10%	-	2.15E-08	13.3
HBVZ04C07	2.405	14.8	40%	1.534E-09	IC	IC

Figure 1



mAb-1	Mouse Strain	KD (nM) / t½ (min) @ 25°C	MERS hFc Capture Level (nm)	mAb-1 Binding (nm)	mAb #	mAb-2 Binding to the Pre-Complex of mAb-1 & MERS.hFc															
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
H2aM15281N	1633	0.39 / 14	0.67 ± 0.03	0.67 ± 0.02	1	0.08	0.11	0.08	0.08	0.08	0.08	0.07	0.41	0.36	0.56	0.53	0.55	0.51	0.61	0.62	0.41	0.50	0.48	0.02
H1M15290N	1633	0.44 / 55	0.68 ± 0.02	0.71 ± 0.02	2	0.08	0.08	0.06	0.08	0.08	0.07	0.07	0.39	0.29	0.52	0.50	0.50	0.44	0.60	0.61	0.39	0.49	0.55	0.03
H1M15293N	1633	0.33 / 58	0.67 ± 0.03	0.67 ± 0.02	3	0.11	0.10	0.08	0.10	0.11	0.10	0.09	0.47	0.35	0.57	0.53	0.54	0.48	0.64	0.61	0.39	0.51	0.51	0.03
H2bM15291N	1633	0.56 / 82	0.73 ± 0.07	0.62 ± 0.01	4	0.09	0.09	0.08	0.10	0.09	0.08	0.09	0.33	0.32	0.55	0.53	0.53	0.47	0.60	0.59	0.41	0.52	0.60	0.04
H2aM15272N	1633	0.44 / 16	0.68 ± 0.04	0.67 ± 0.03	5	0.08	0.11	0.07	0.07	0.09	0.07	0.07	0.15	0.38	0.56	0.53	0.54	0.49	0.63	0.60	0.38	0.52	0.46	0.03
H2bM15292N	1633	0.34 / 75	0.64 ± 0.03	0.62 ± 0.02	6	0.10	0.11	0.08	0.09	0.10	0.14	0.08	0.33	0.39	0.57	0.52	0.55	0.48	0.61	0.62	0.43	0.53	0.54	0.04
H2aM15271N	Adam6/VI-3	1.37 / 9	0.68 ± 0.04	0.68 ± 0.02	7	0.09	0.10	0.07	0.08	0.08	0.07	0.08	0.11	0.40	0.52	0.50	0.23	0.47	0.58	0.60	0.39	0.50	0.46	0.00
H2aM15270N	Adam6/VI-3	0.78 / 19	0.69 ± 0.03	0.74 ± 0.02	8	0.32	0.27	0.21	0.16	0.09	0.14	0.06	0.10	0.11	0.06	0.06	0.06	0.05	0.09	0.05	0.40	0.49	0.50	0.02
H1M15280N	1633	18.5 / 2	0.56 ± 0.02	0.63 ± 0.02	9	0.45	0.49	0.44	0.48	0.48	0.48	0.50	0.29	0.18	0.24	0.24	0.25	0.22	0.26	0.27	0.38	0.42	0.42	0.04
H2aM15268N	Adam6/VI-3	0.36 / 12	0.82 ± 0.10	0.69 ± 0.01	10	0.60	0.62	0.53	0.53	0.56	0.53	0.55	0.14	0.14	0.08	0.08	0.07	0.09	0.11	0.59	0.42	0.55	0.65	0.03
H1M15267N	Adam6/VI-3	0.18 / 75	0.80 ± 0.10	0.68 ± 0.02	11	0.57	0.58	0.53	0.52	0.58	0.50	0.58	0.13	0.14	0.08	0.07	0.09	0.06	0.10	0.55	0.43	0.53	0.60	0.05
H2aM15279N	Adam6/VI-3	0.1 / 130	0.68 ± 0.03	0.66 ± 0.02	12	0.58	0.58	0.50	0.53	0.55	0.49	0.39	0.12	0.14	0.06	0.08	0.08	0.07	0.09	0.55	0.42	0.52	0.54	0.03
H1M15289N	Adam6/VI-3	0.21 / 262	0.78 ± 0.09	0.67 ± 0.02	13	0.60	0.58	0.54	0.55	0.56	0.55	0.54	0.14	0.13	0.08	0.07	0.08	0.07	0.10	0.59	0.44	0.52	0.57	0.03
H1M15277N	Adam6/VI-3	0.35 / 13	0.54 ± 0.01	0.72 ± 0.02	14	0.62	0.61	0.52	0.58	0.63	0.54	0.57	0.10	0.10	0.06	0.05	0.07	0.05	0.07	0.64	0.33	0.42	0.38	0.01
H2aM15278N	Adam6/VI-3	0.51 / 13	0.79 ± 0.09	0.67 ± 0.01	15	0.61	0.64	0.58	0.56	0.60	0.58	0.58	0.13	0.11	0.55	0.46	0.48	0.51	0.60	0.07	0.41	0.50	0.61	0.00
H2aM15287N	Adam6/VI-3	6.98 / 26	0.66 ± 0.03	0.59 ± 0.02	16	0.60	0.57	0.50	0.53	0.56	0.57	0.57	0.62	0.44	0.58	0.55	0.55	0.51	0.66	0.58	0.10	0.14	0.49	0.03
H1M15288N	Adam6/VI-3	4.15 / 16	0.66 ± 0.04	0.66 ± 0.02	17	0.59	0.56	0.48	0.52	0.54	0.53	0.56	0.60	0.41	0.56	0.51	0.56	0.51	0.60	0.61	0.08	0.08	0.40	0.03
H1M15269N	Adam6/VI-3	0.62 / 107	0.62 ± 0.05	0.66 ± 0.11	18	0.61	0.58	0.51	0.58	0.62	0.59	0.60	0.59	0.49	0.49	0.49	0.49	0.47	0.53	0.58	0.31	0.41	0.08	0.04
Buffer	N/A	N/A	0.63 ± 0.03	0.11 ± 0.01	19	0.61	0.61	0.56	0.58	0.57	0.61	0.58	0.61	0.50	0.56	0.57	0.59	0.55	0.61	0.61	0.51	0.58	0.50	0.04

Figure 2



mAb Titer	mAb-1	MERS.mFc Capture Level (nm)	mAb-1 Binding (nm)	mAb #	mAb-2 Binding to the Pre-complex of mAb-1 & MERS.mFc															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
9.18	H1H15215P	0.38 ± 0.01	0.56 ± 0.02	1	0.02	0.04	0.02	0.19	0.03	0.03	0.04	0.05	0.04	0.03	0.03	0.30	0.29	0.12	0.33	0.04
16.6	H1H15177P	0.45 ± 0.01	0.60 ± 0.02	2	0.04	0.06	0.03	0.22	0.05	0.03	0.05	0.05	0.07	0.07	0.06	0.39	0.36	0.21	0.36	0.06
9.7	H1H15203P	0.36 ± 0.02	0.51 ± 0.02	3	0.01	0.04	0.02	0.20	0.04	0.01	0.02	0.03	0.04	0.01	0.03	0.31	0.33	0.19	0.34	0.04
11	H1H15211P	0.45 ± 0.01	0.76 ± 0.03	4	0.01	0.02	-0.01	0.14	0.01	0.00	0.01	0.01	0.02	-0.01	0.02	0.35	0.32	0.18	0.36	0.02
6.64	H1H15188P	0.38 ± 0.02	0.54 ± 0.02	5	0.02	0.05	0.03	0.19	0.04	0.03	0.03	0.02	0.04	0.02	0.03	0.04	0.04	0.03	0.03	0.06
6.63	H1H15208P	0.35 ± 0.02	0.46 ± 0.03	6	0.02	0.03	0.03	0.25	0.04	0.01	0.03	0.02	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.02
8.29	H1H15228P2	0.37 ± 0.01	0.52 ± 0.02	7	0.00	0.03	0.01	0.19	0.03	0.01	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.01	0.02
8.51	H1H15233P2	0.34 ± 0.02	0.46 ± 0.03	8	0.01	0.03	0.01	0.23	0.04	0.02	0.01	0.02	0.03	0.00	0.01	0.02	0.02	0.01	0.02	0.03
9.43	H1H15237P2	0.32 ± 0.02	0.39 ± 0.02	9	0.01	0.05	0.01	0.21	0.03	-0.01	0.02	0.01	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.04
9.56	H1H15253P2	0.32 ± 0.02	0.38 ± 0.02	10	0.03	0.06	0.05	0.27	0.02	0.01	0.02	0.01	0.02	0.01	0.01	0.03	0.00	0.01	0.02	0.03
9.13	H1H15259P2	0.33 ± 0.01	0.42 ± 0.01	11	0.12	0.15	0.12	0.30	0.01	0.00	0.00	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.02
6.32	H1H15231P2	0.37 ± 0.01	0.50 ± 0.02	12	0.33	0.38	0.35	0.53	0.02	0.01	0.02	0.03	0.01	-0.01	0.02	0.03	0.02	0.02	0.02	0.03
7.45	H1H15249P2	0.32 ± 0.02	0.40 ± 0.02	13	0.29	0.33	0.30	0.52	0.04	0.01	0.01	0.02	0.03	0.02	0.02	0.03	0.01	0.01	0.02	0.02
0.24	H1H15260P2	0.32 ± 0.01	0.39 ± 0.01	14	0.28	0.39	0.35	0.54	0.04	0.02	0.04	0.04	0.05	0.02	0.03	0.04	0.02	0.03	0.04	0.02
7.22	H1H15264P2	0.33 ± 0.01	0.41 ± 0.01	15	0.32	0.38	0.34	0.55	0.03	0.02	0.01	0.01	0.02	0.00	0.02	0.01	0.00	0.01	0.02	0.02
10	REGN1536	0.33 ± 0.01	0.12 ± 0.01	16	0.35	0.38	0.33	0.55	0.25	0.27	0.28	0.29	0.28	0.24	0.30	0.29	0.27	0.24	0.30	0.03

Figure 3

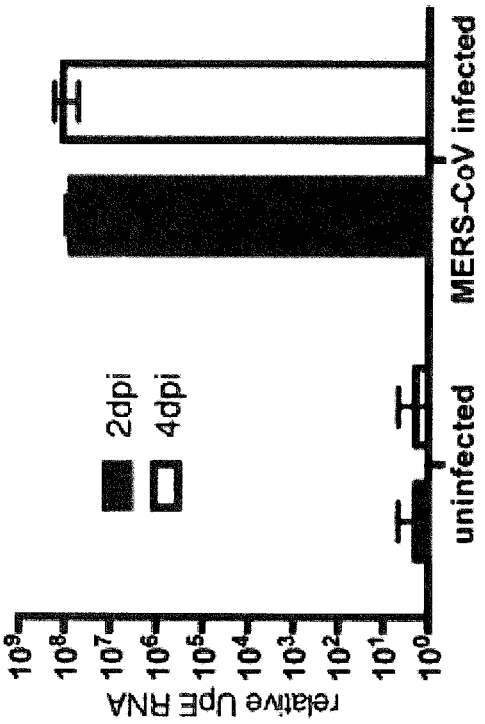

relative UpE RNA
10^9
10^8
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
2dpi
4dpi
uninfected
MERS-CoV infected

Figure 4

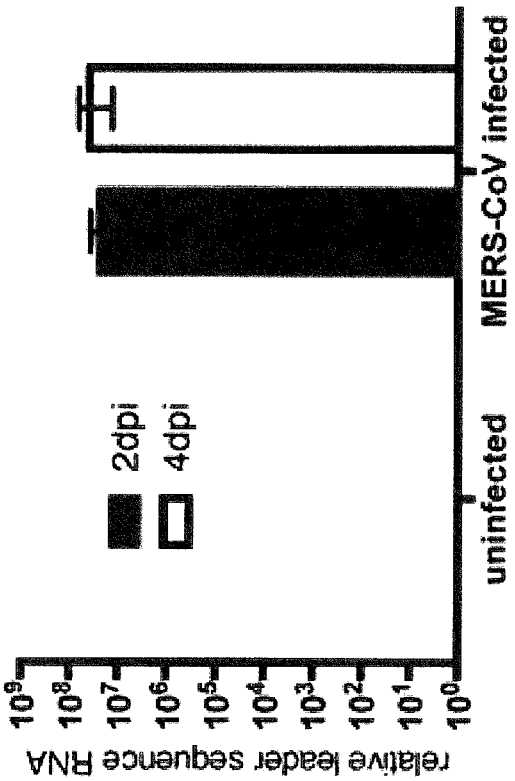

relative leader sequence RNA
10^9
10^8
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
2dpi
4dpi
uninfected
MERS-CoV infected

Figure 5

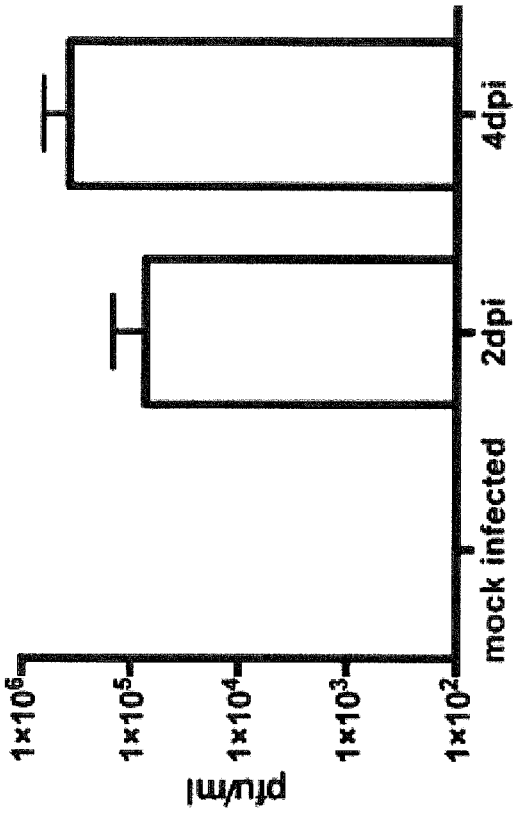


Figure 6

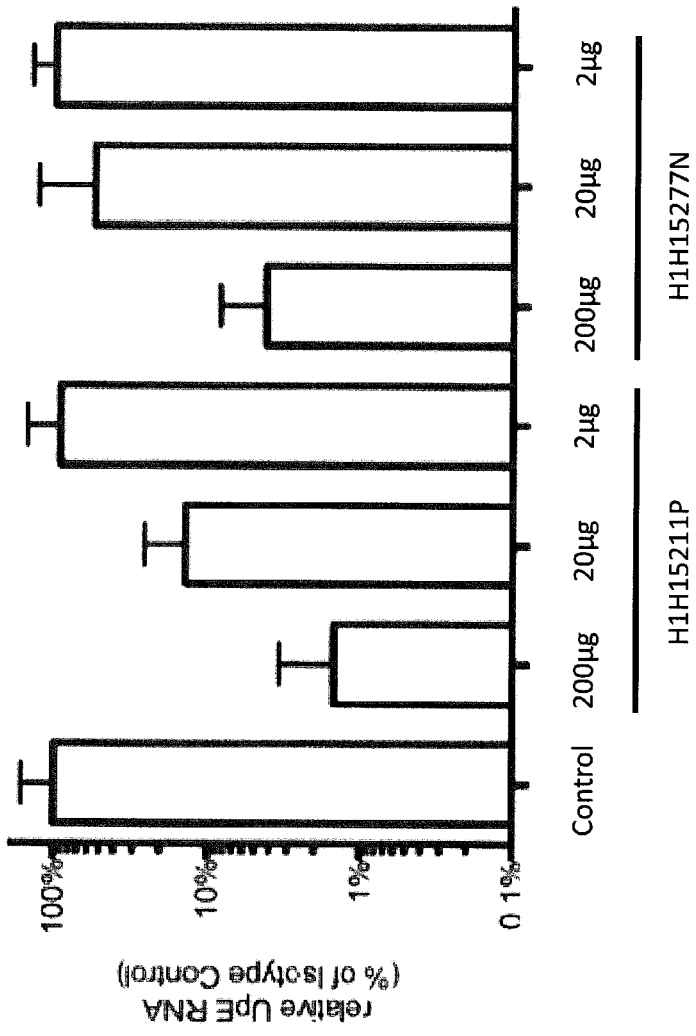

relative UpE RNA
(% of Isotype Control)
100%
10%
1%
0 1%
Control
200µg
20µg
2µg
200µg
20µg
2µg
H1H15211P
H1H15277N

Figure 7

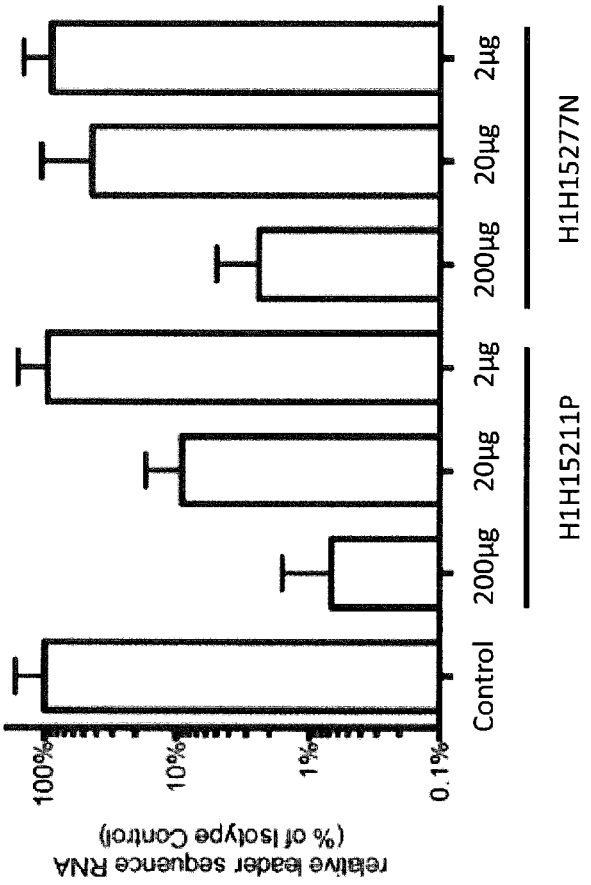

relative leader sequence RNA
(% of Isotype Control)
100%
10%
1%
0.1%
Control
200µg
20µg
2µg
200µg
20µg
2µg
H1H15211P
H1H15277N

Figure 8

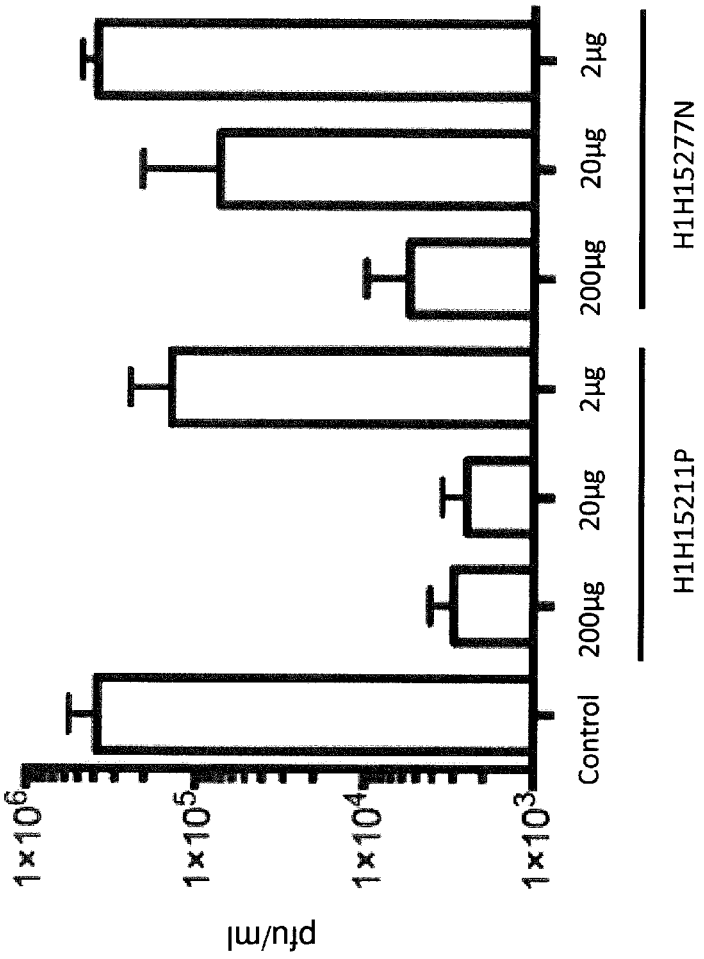

pfu/ml
1×10^6
1×10^5
1×10^4
1×10^3
Control
200µg
20µg
2µg
200µg
20µg
2µg
H1H15211P
H1H15277N

Figure 9

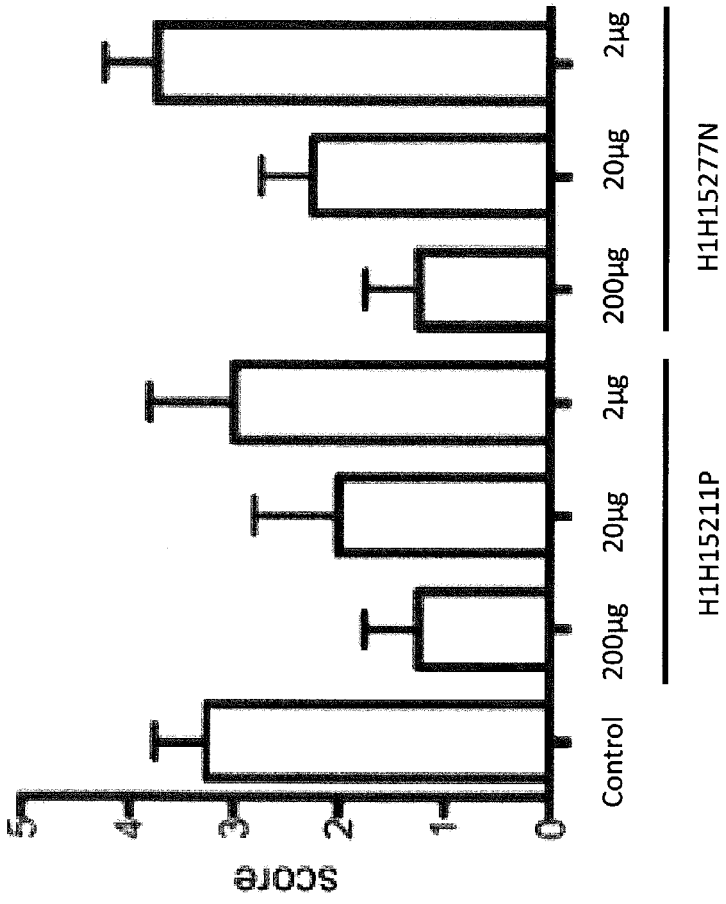

Score
0
1
2
3
4
5
Control
200µg
20µg
2µg
200µg
20µg
2µg
H1H15211P
H1H15277N

Figure 10

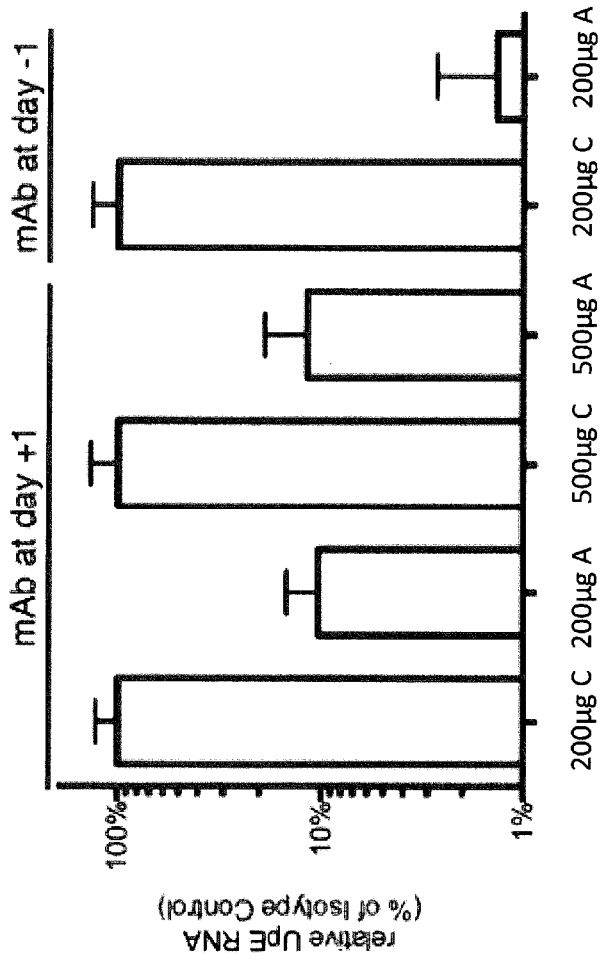

mAb at day +1
mAb at day -1
200µg C
200µg A
500µg C
500µg A
200µg C
200µg A
100%
10%
1%
relative UpE RNA
(% of Isotype Control)

Figure 11

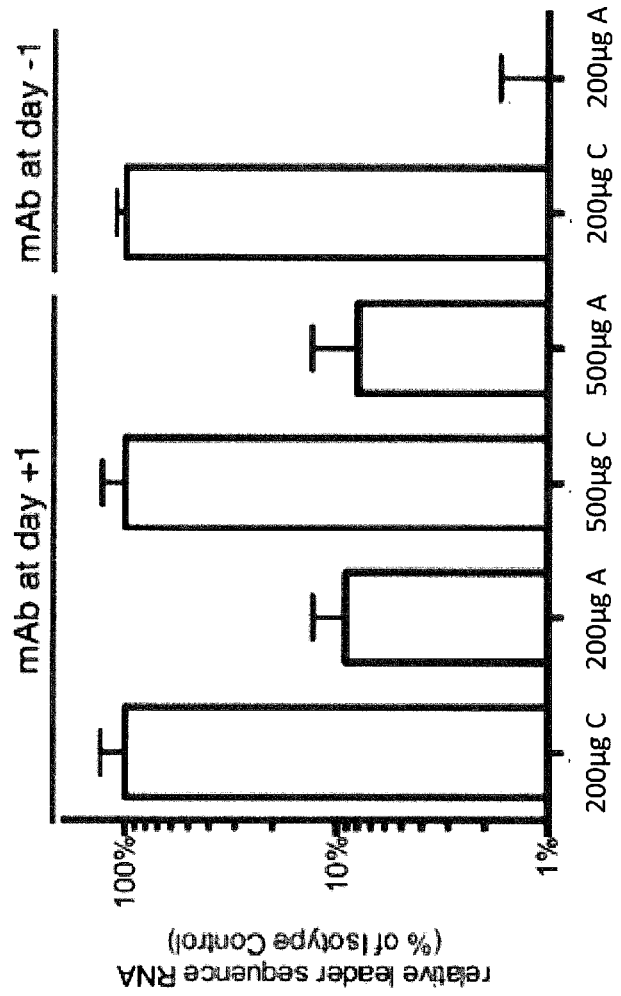

mAb at day +1
mAb at day -1
200µg C
200µg A
500µg C
500µg A
200µg C
200µg A
100%
10%
1%
relative leader sequence RNA
(% of Isotype Control)

Figure 12

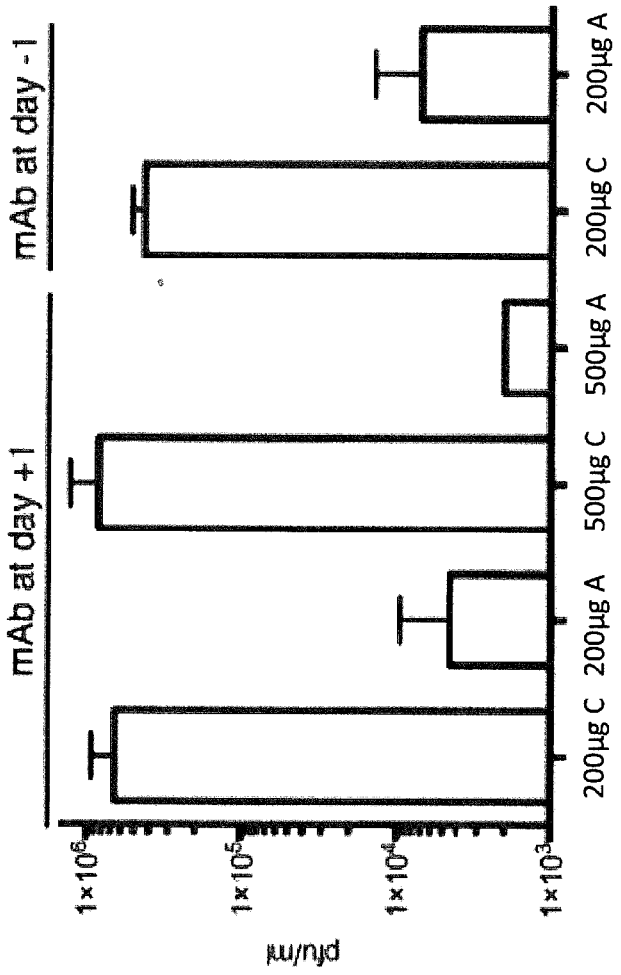

mAb at day +1
mAb at day -1
200µg C
200µg A
500µg C
500µg A
200µg C
200µg A
1×10^6
1×10^5
1×10^4
1×10^3
pfu/ml

Figure 13

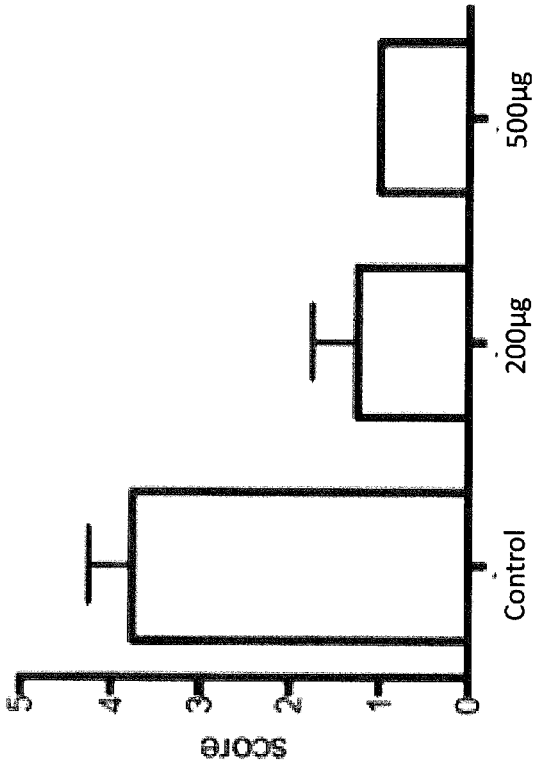


Figure 14