FIGURE 1

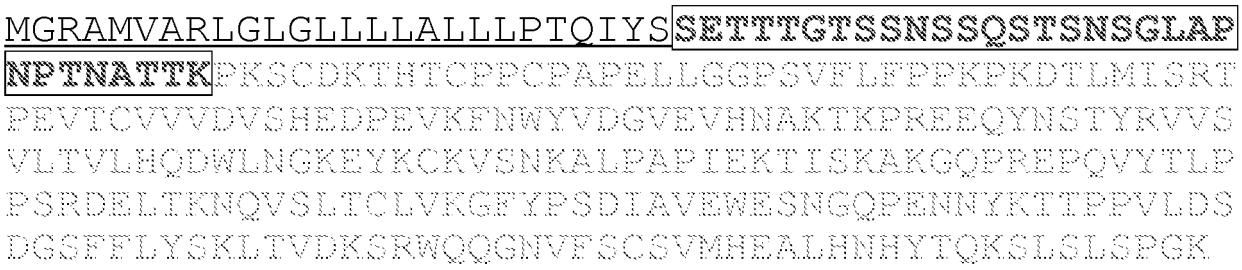

MGRAMVARLGLGLLLLALLLPTQIYSSETTTGTSSNSSQSTSNSGLAP
NPTNATTKPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRT
PEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVS
VLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLP
PSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDS
DGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FIGURE 2

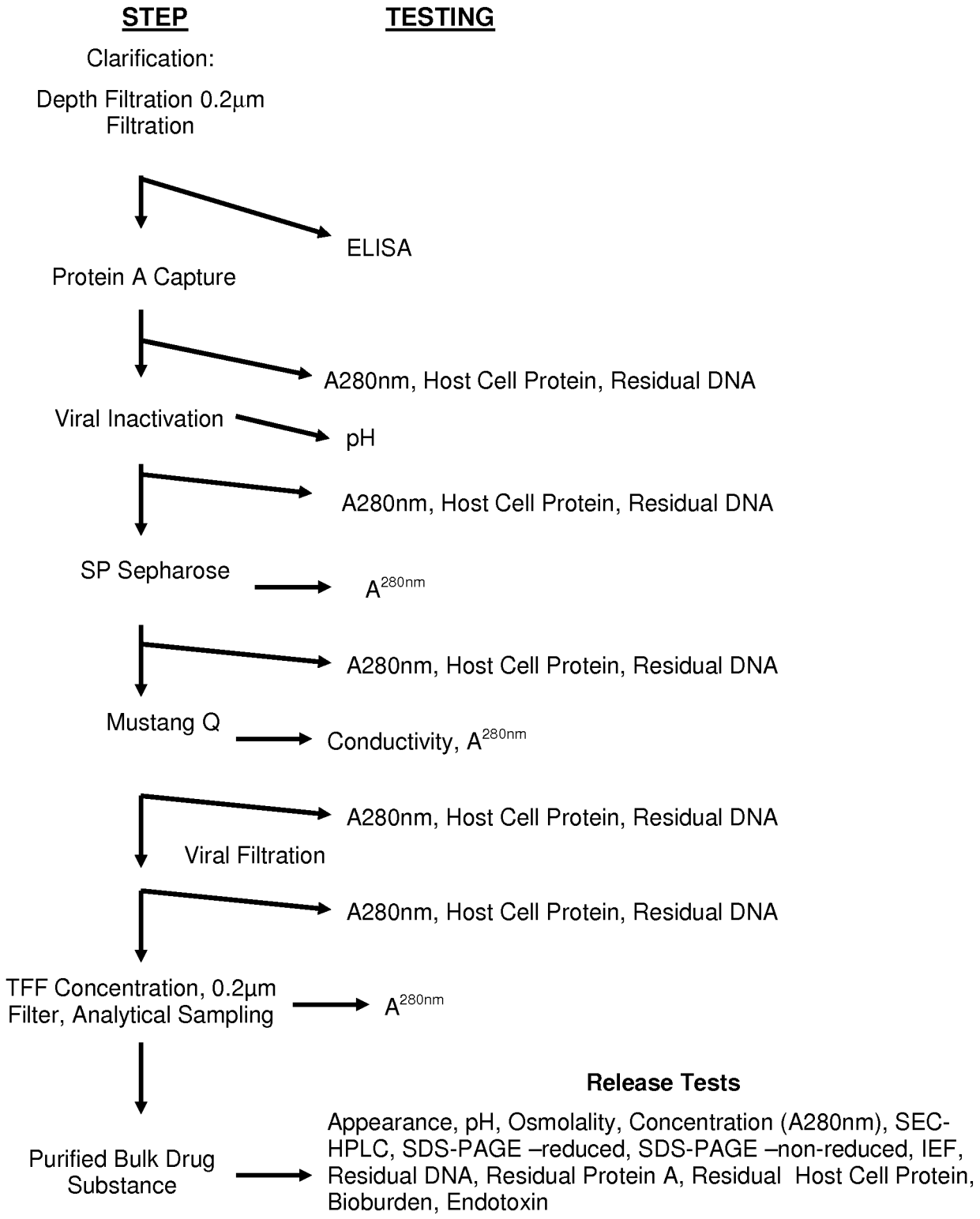

STEP
TESTING
Clarification:
Depth Filtration 0.2µm Filtration
ELISA
Protein A Capture
A280nm, Host Cell Protein, Residual DNA
Viral Inactivation
pH
A280nm, Host Cell Protein, Residual DNA
SP Sepharose
A280nm
A280nm, Host Cell Protein, Residual DNA
Mustang Q
Conductivity, A280nm
A280nm, Host Cell Protein, Residual DNA
Viral Filtration
A280nm, Host Cell Protein, Residual DNA
TFF Concentration, 0.2µm Filter, Analytical Sampling
A280nm
Release Tests
Purified Bulk Drug Substance
Appearance, pH, Osmolality, Concentration (A280nm), SEC-HPLC, SDS-PAGE –reduced, SDS-PAGE –non-reduced, IEF, Residual DNA, Residual Protein A, Residual Host Cell Protein, Bioburden, Endotoxin

FIGURE 3

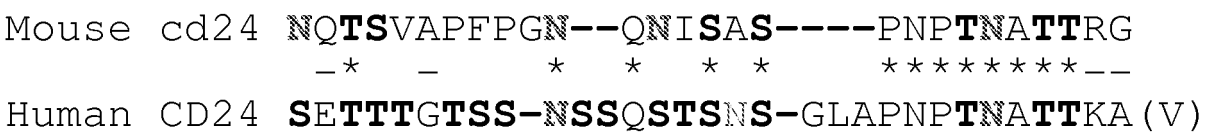

Mouse cd24 NQTSVAPFPGN--QNISAS----PNPTNATTRG
Human CD24 SETTTGTSS-NSSQSTSNS-GLAPNPTNATTKA(V)

FIGURE 4

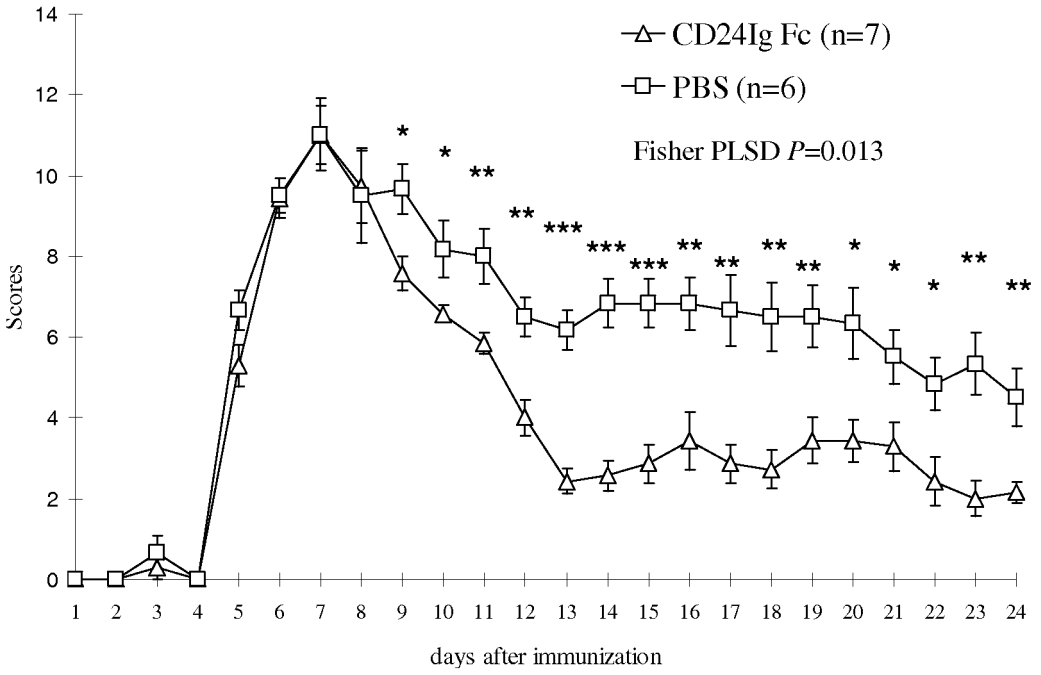
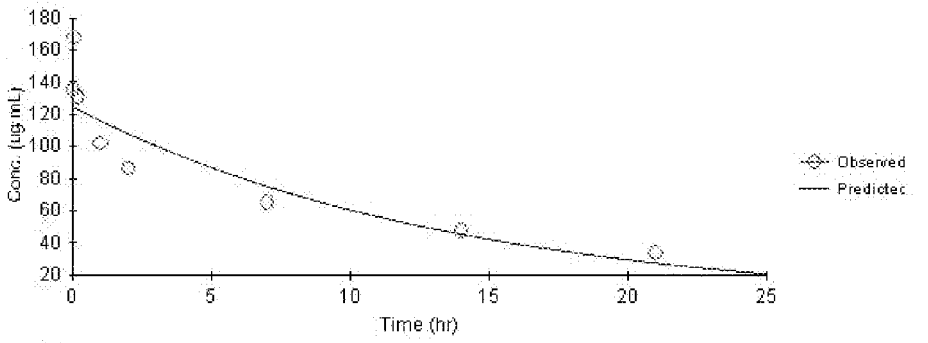
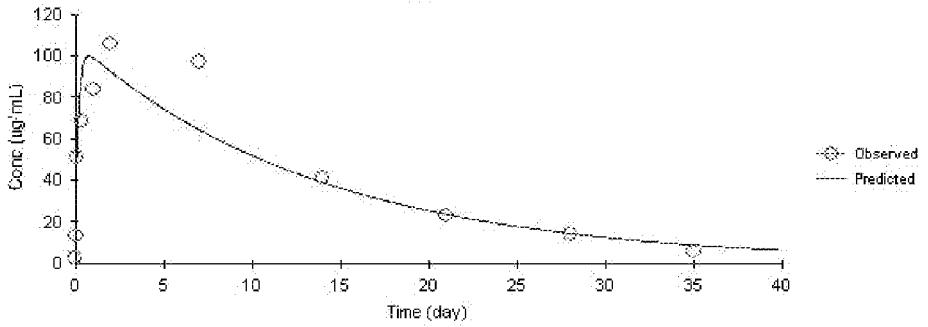

CD24Ig Fc (n=7)
PBS (n=6)
Fisher PLSD P=0.013
Scores
days after immunization
0
2
4
6
8
10
12
14
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
* * ** ** *** *** *** ** ** ** * * * **

FIGURE 5

a.



b.



c.

Routes	Parameter	Units	Estimate	StdError	CV%
i.v.	AUC	day*ug/mL	1709.5	305.2	17.85
s.c			1453.2	181.4	12.49
i.v.	K10_HL	day	9.52	1.96	20.56
s.c.			9.54	1.43	14.97
i.v.	Cmax	ug/mL	124.4	10.3	8.31
s.c.			99.6	11.1	11.11

FIGURE 6

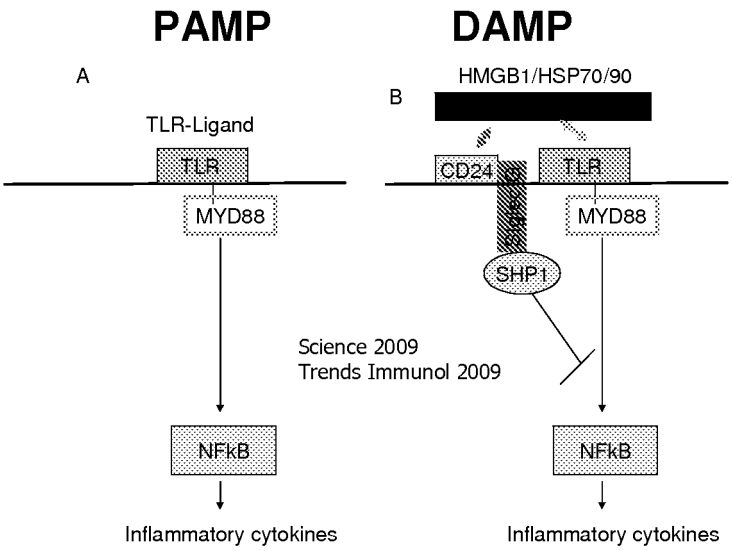

PAMP
DAMP
A
B
TLR-Ligand
HMGB1/HSP70/90
TLR
CD24
TLR
MYD88
MYD88
SHP1
Science 2009
Trends Immunol 2009
NFkB
NFkB
Inflammatory cytokines
Inflammatory cytokines

FIGURE 7

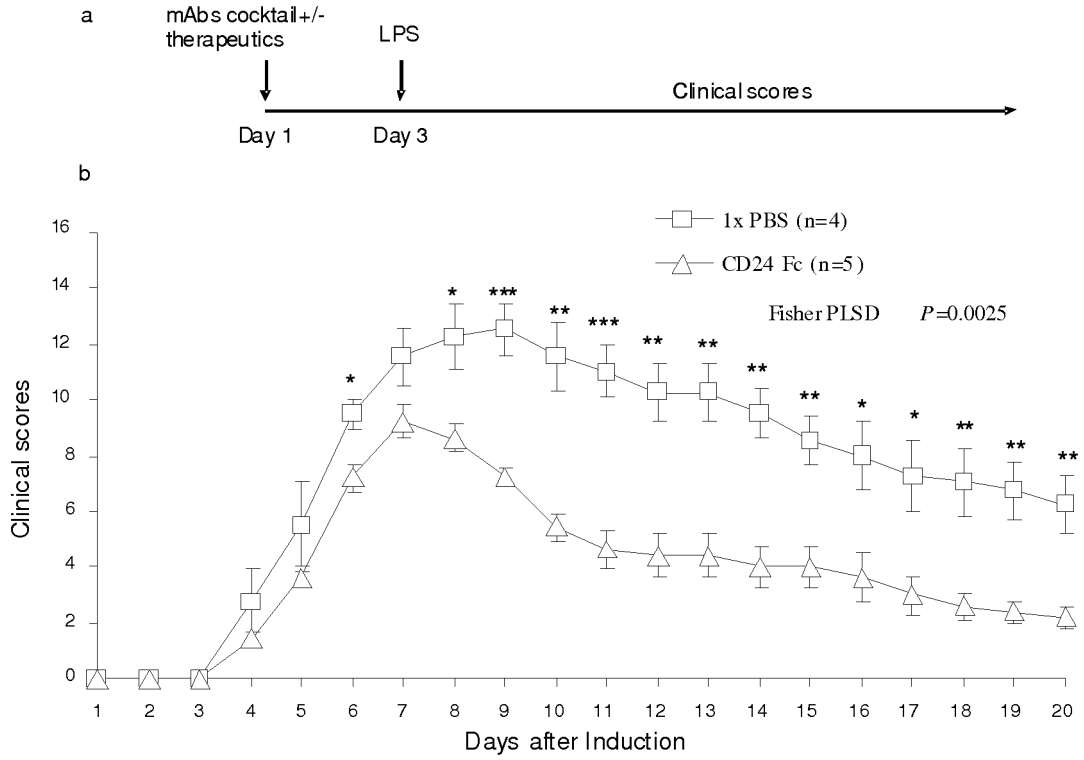

a
mAbs cocktail+/-
therapeutics
LPS
Clinical scores
Day 1
Day 3
b
1x PBS (n=4)
CD24 Fc (n=5)
Fisher PLSD
P=0.0025
Clinical scores
Days after Induction

FIGURE 8

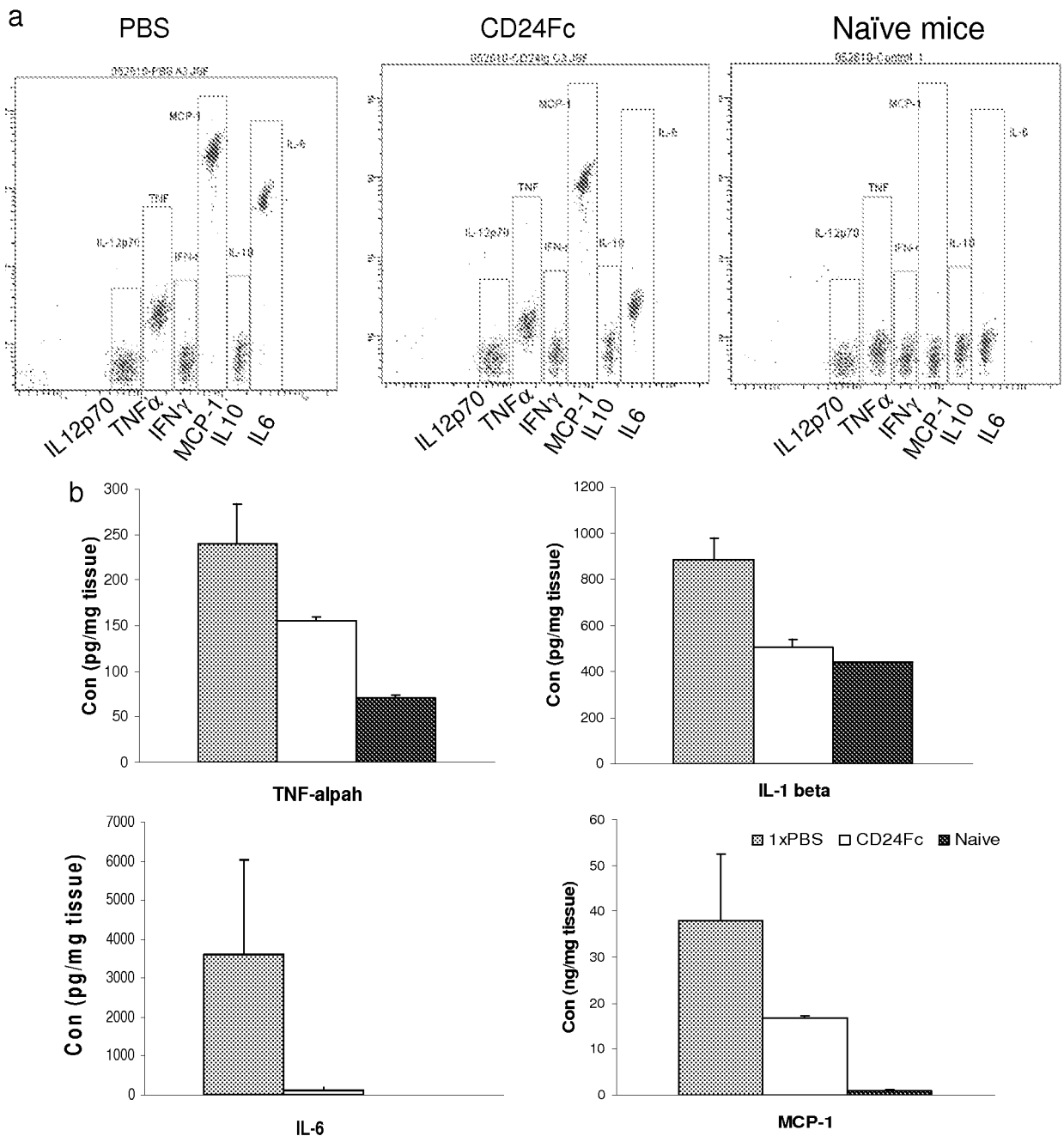

a
PBS
CD24Fc
Naïve mice
MCP-1
IL-6
TNF
IL-12p70
IFN-γ
IL-10
IL12p70
TNFα
IFNγ
MCP-1
IL10
IL6
b
Con (pg/mg tissue)
TNF-alpah
IL-1 beta
IL-6
Con (ng/mg tissue)
MCP-1
1xPBS
CD24Fc
Naive

FIGURE 9

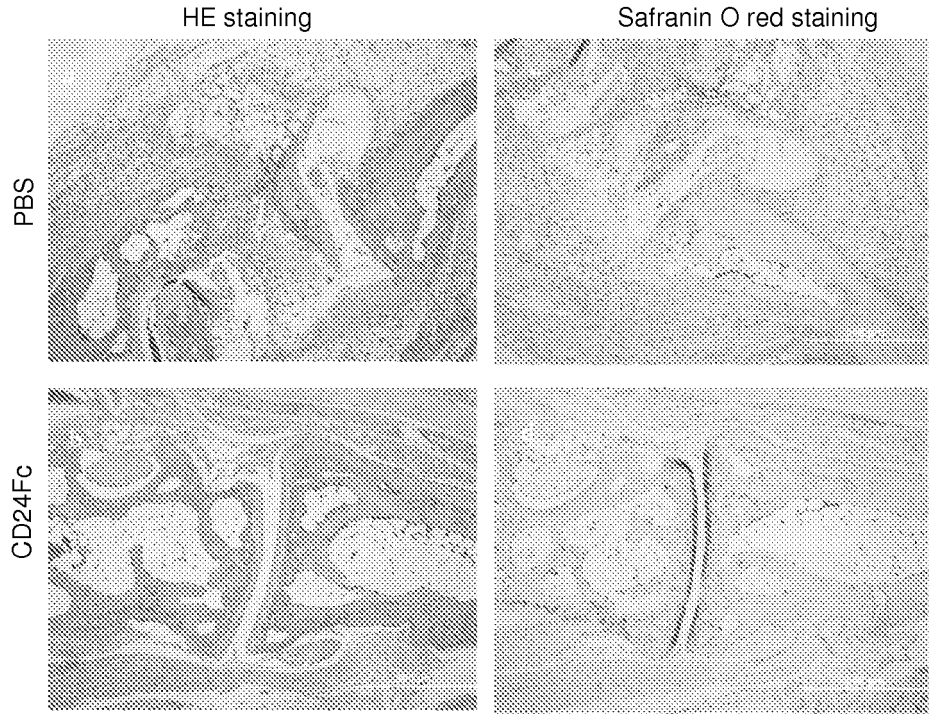


FIGURE 10

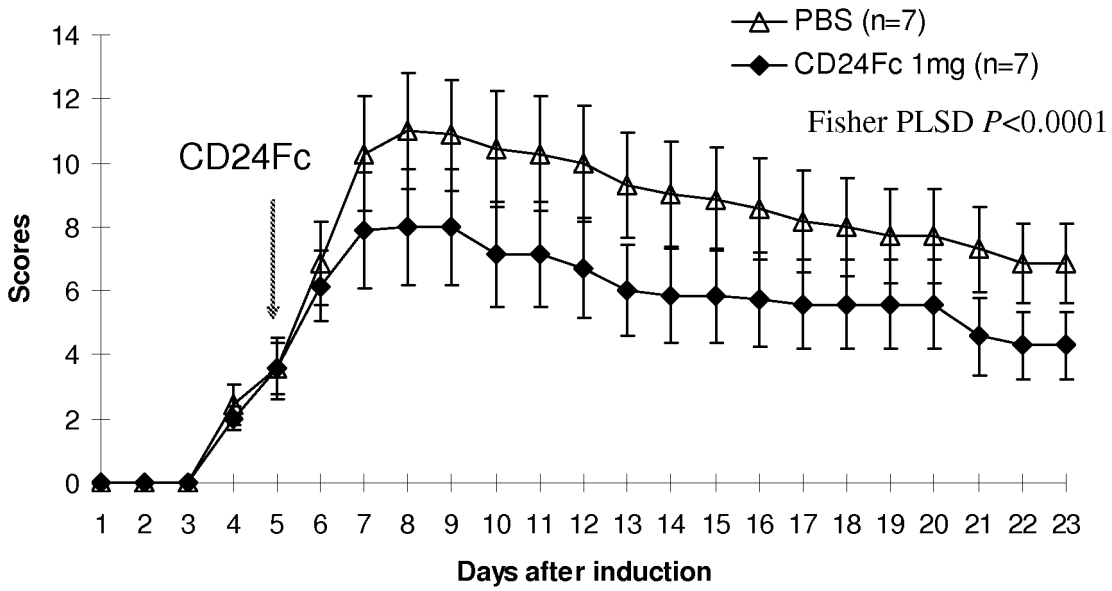

PBS (n=7)
CD24Fc 1mg (n=7)
Fisher PLSD P<0.0001
CD24Fc
Scores
Days after induction
0
2
4
6
8
10
12
14
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

FIGURE 11

The dose dependant therapeutic effect of CD24Fc

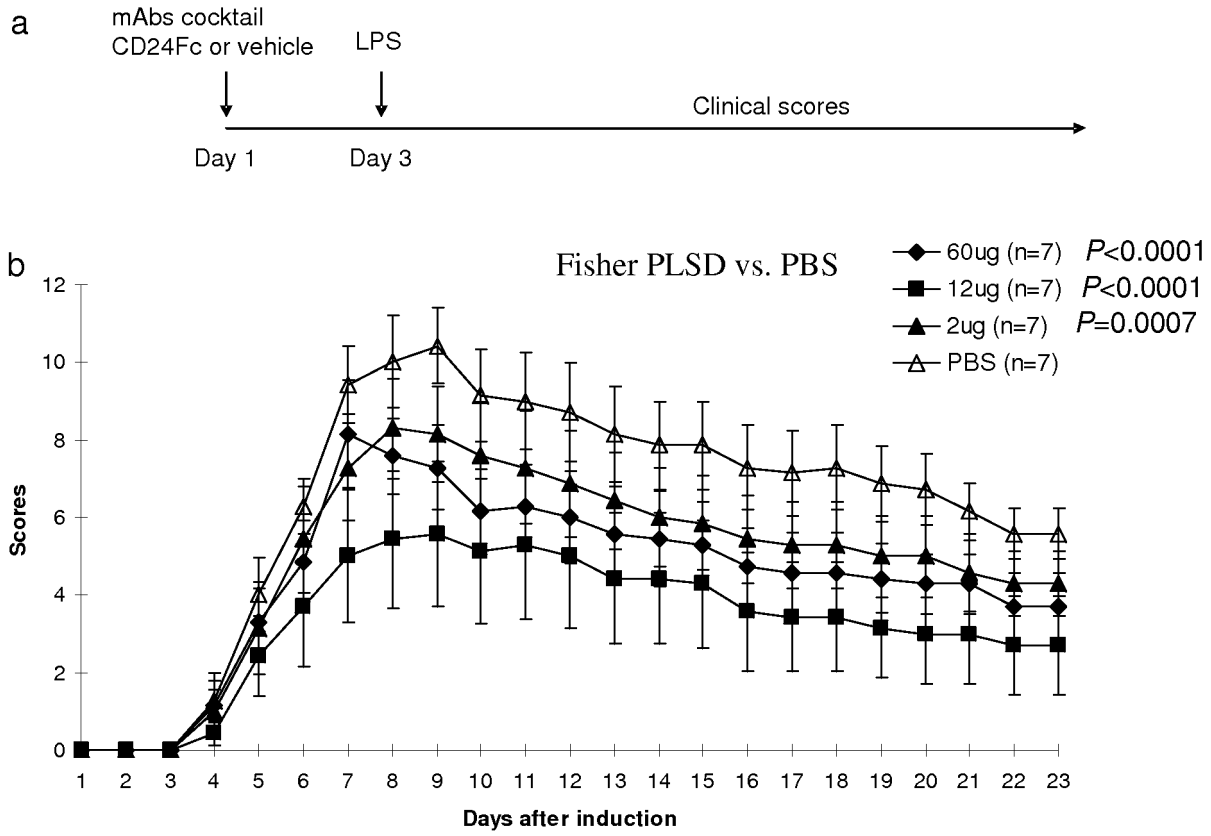
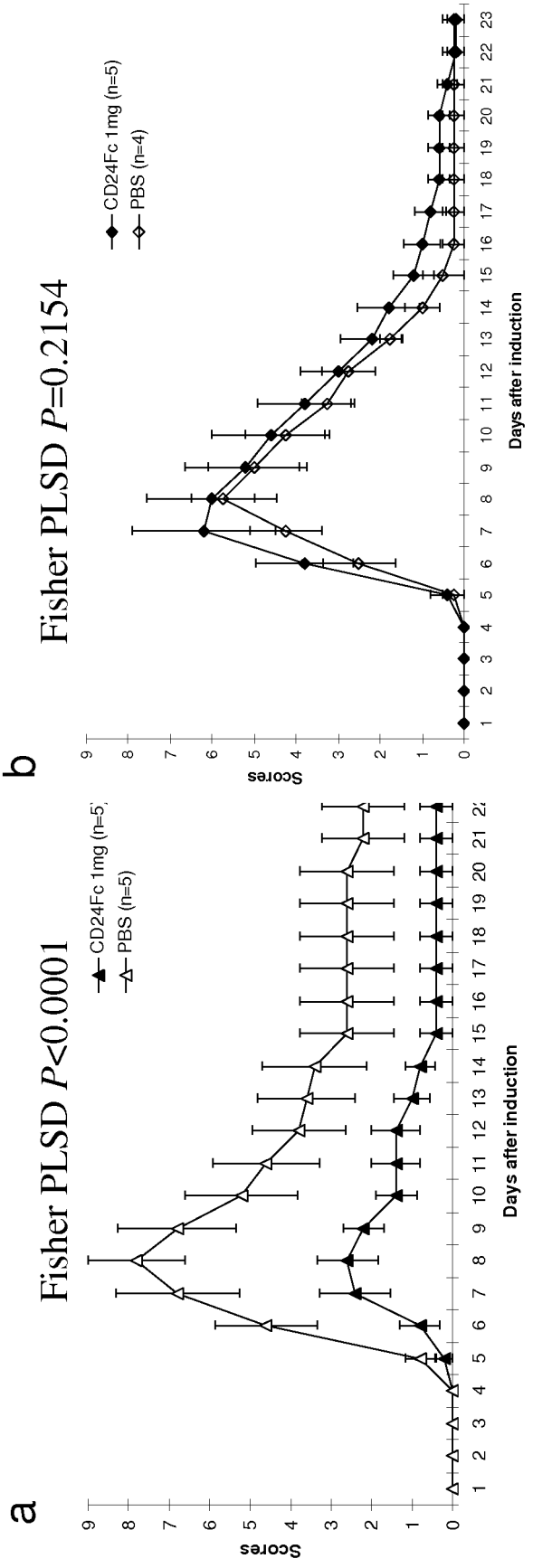


FIGURE 12


a
Fisher PLSD P<0.0001
CD24Fc 1mg (n=5)
PBS (n=5)
Scores
Days after induction
b
Fisher PLSD P=0.2154
CD24Fc 1mg (n=5)
PBS (n=4)
Scores
Days after induction