Figure 1

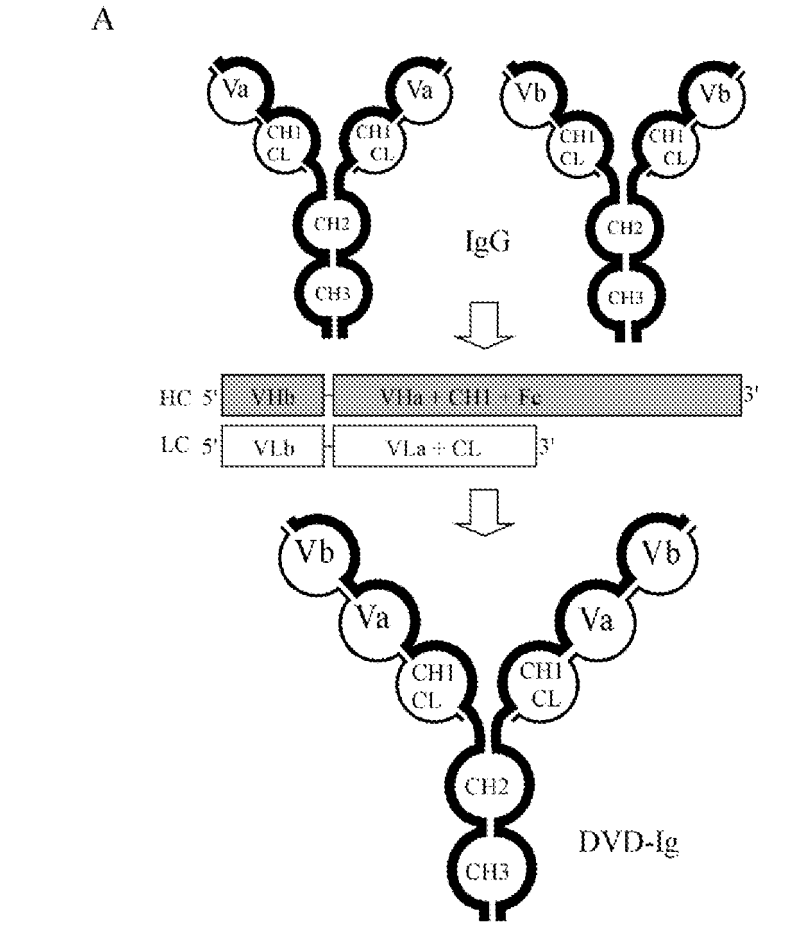

A
Va
Vb
CH1
CL
CH2
CH3
IgG
HC 5'
VHb
VHa + CH1 - Fc
3'
LC 5'
VLb
VLa + CL
3'
DVD-Ig
B
DVD1-Ig
DVD2-Ig
α
3D12.E3
Chimera
β
13F5.G5
Chimera
5'
L
VHα
VHβ
CH1-Fc (aC-H)
VLα
VLβ
hCκ
3'

Figure 2A

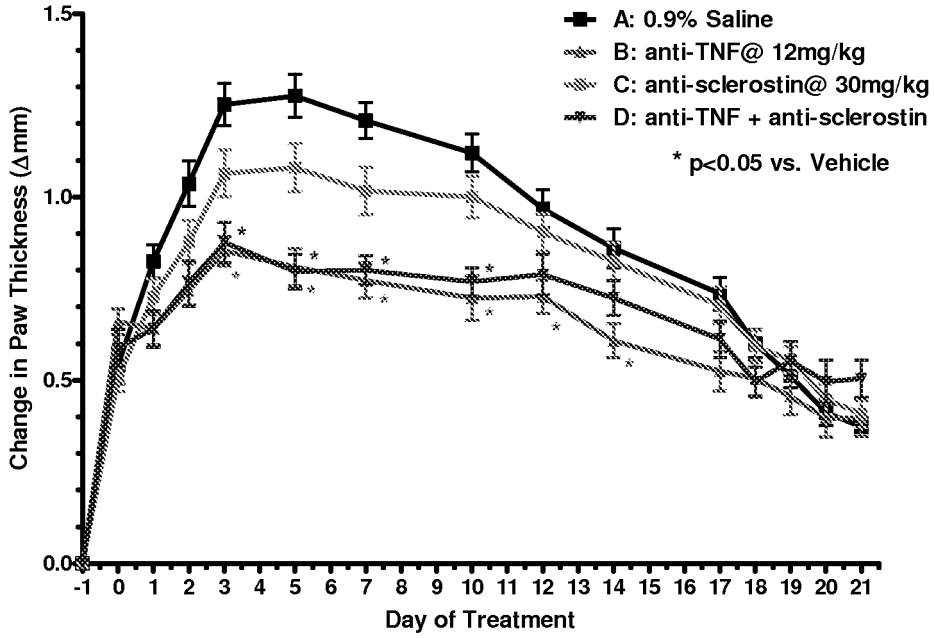

A: 0.9% Saline
B: anti-TNF@ 12mg/kg
C: anti-sclerostin@ 30mg/kg
D: anti-TNF + anti-sclerostin
* p<0.05 vs. Vehicle
Change in Paw Thickness (Δmm)
1.5
1.0
0.5
0.0
-1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Day of Treatment

Figure 2B

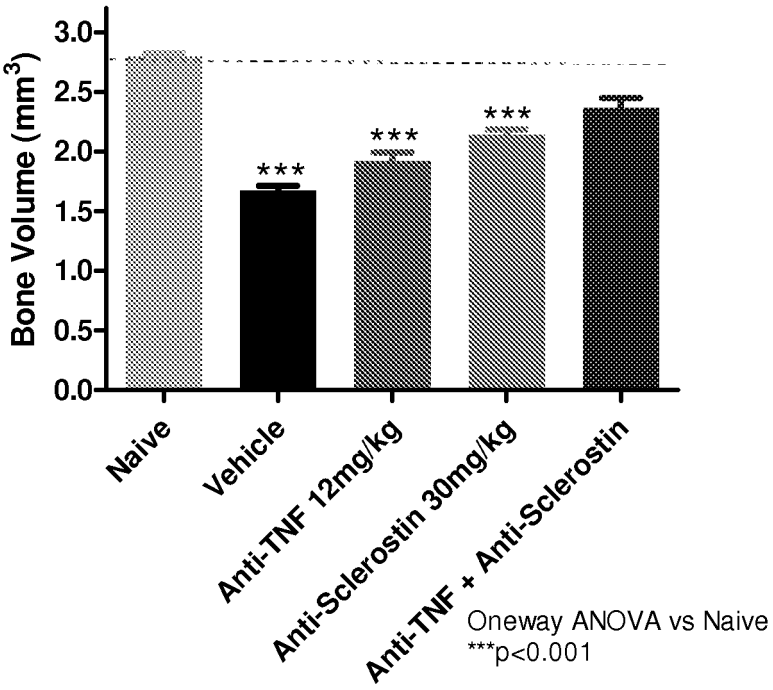

Bone Volume (mm3)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
***
***
***
Naive
Vehicle
Anti-TNF 12mg/kg
Anti-Sclerostin 30mg/kg
Anti-TNF + Anti-Sclerostin
Oneway ANOVA vs Naive
***p<0.001

Figure 2C

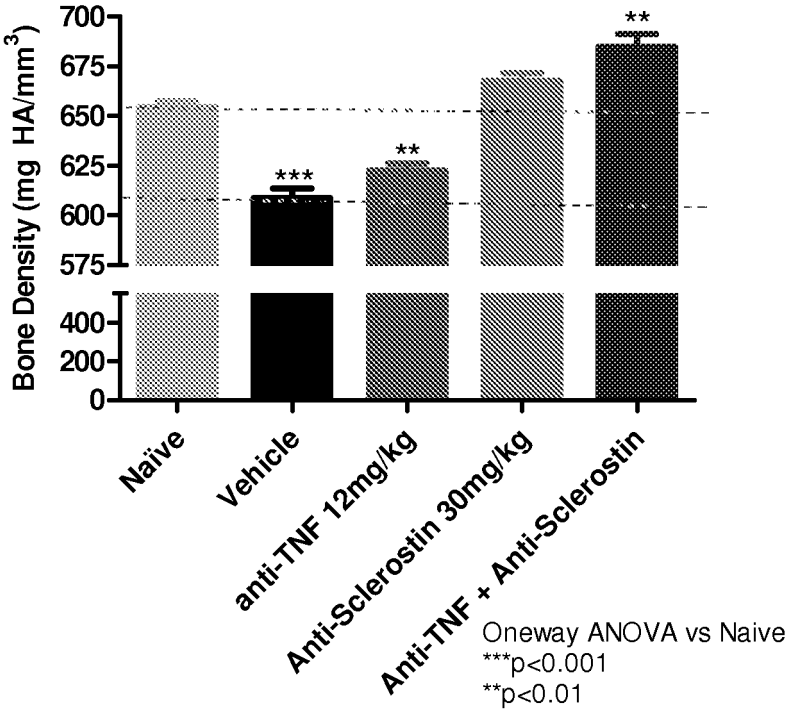

Bone Density (mg HA/mm3)
700
675
650
625
600
575
400
200
0
***
**
**
Naïve
Vehicle
anti-TNF 12mg/kg
Anti-Sclerostin 30mg/kg
Anti-TNF + Anti-Sclerostin
Oneway ANOVA vs Naive
***p<0.001
**p<0.01

Figure 3

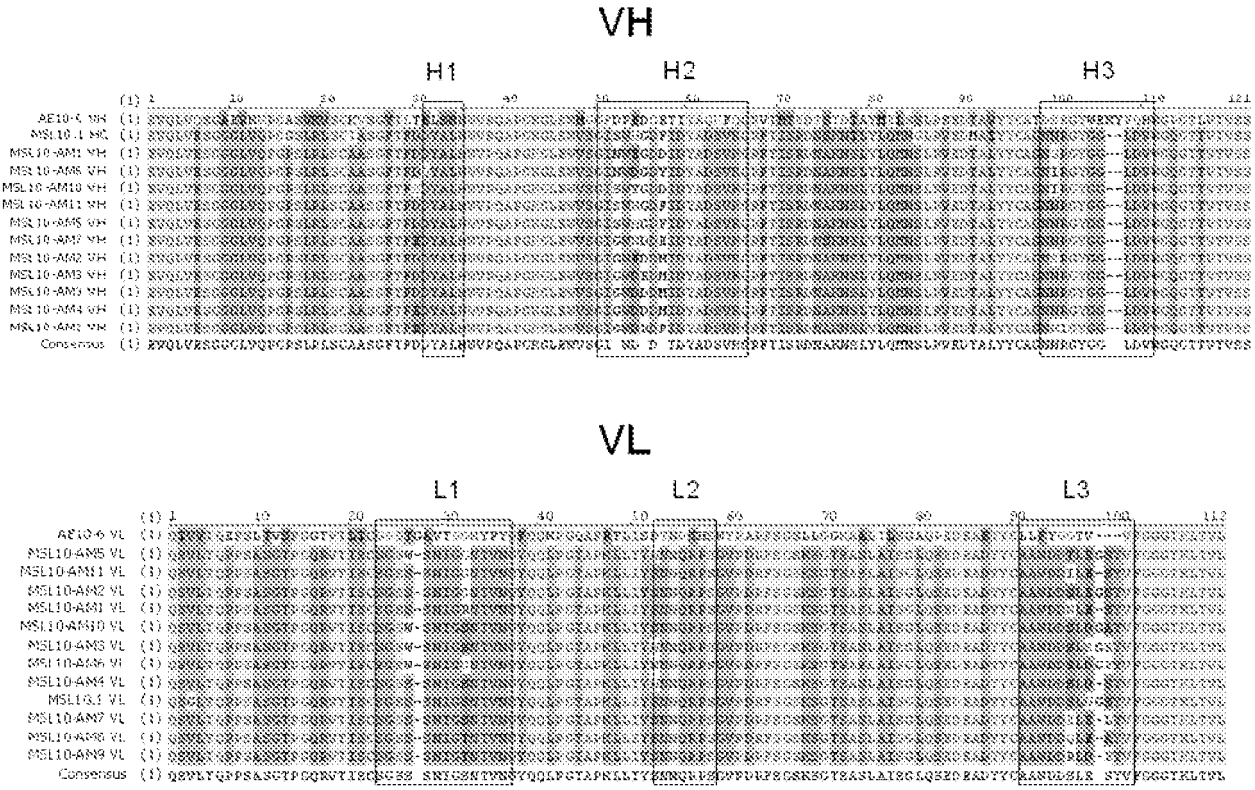


Figure 4A

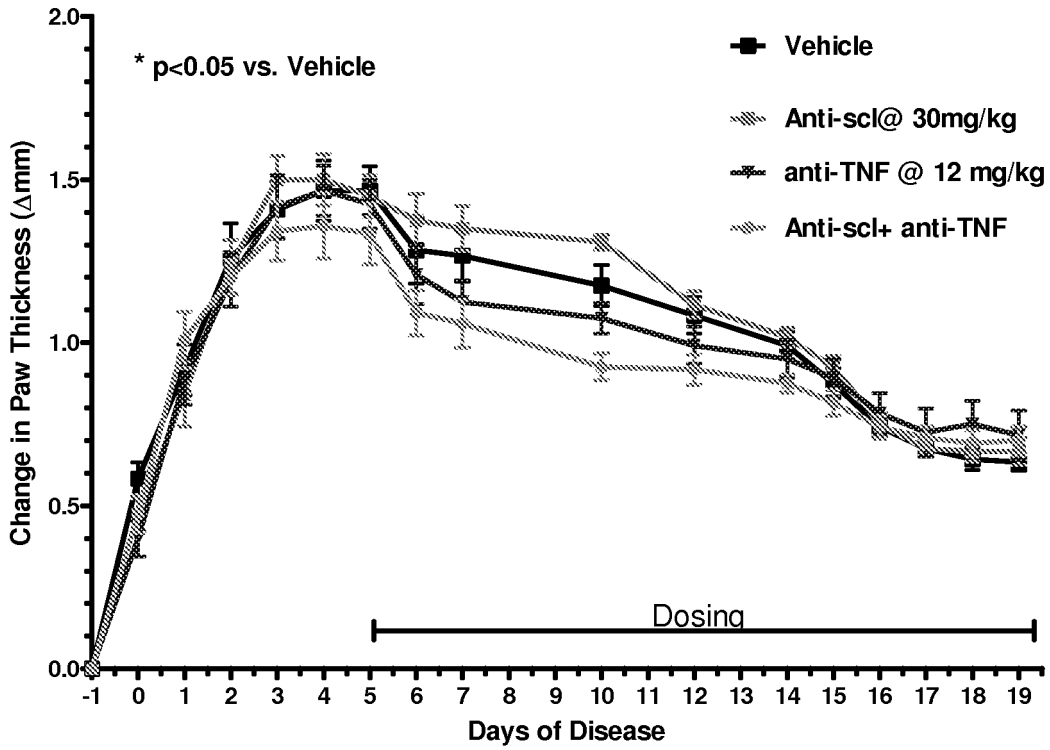

* p<0.05 vs. Vehicle
Vehicle
Anti-scl@ 30mg/kg
anti-TNF @ 12 mg/kg
Anti-scl+ anti-TNF
Change in Paw Thickness (Δmm)
2.0
1.5
1.0
0.5
0.0
Dosing
-1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Days of Disease

Figure 4B

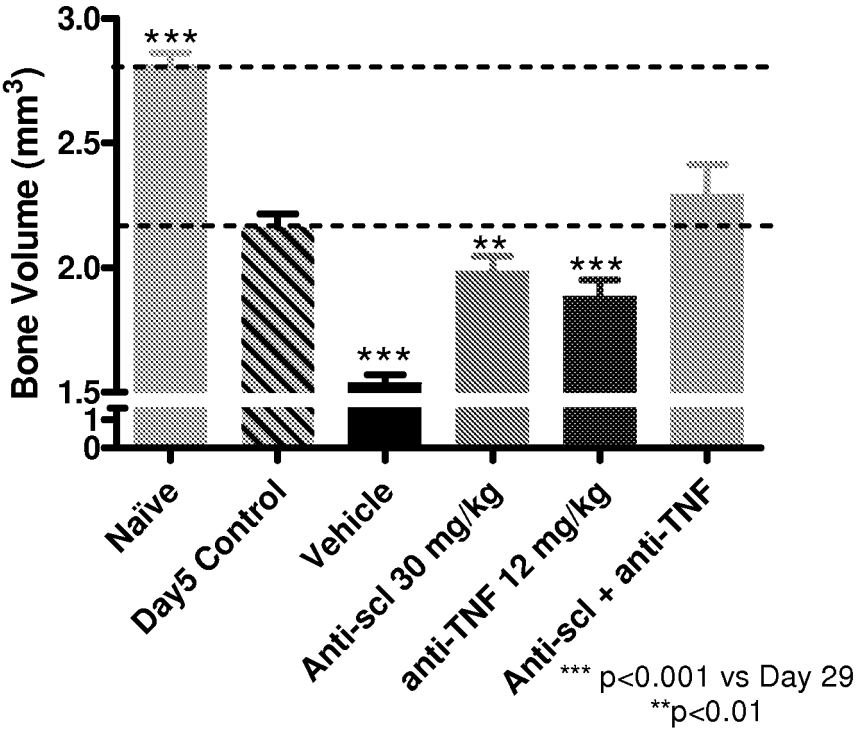

Bone Volume (mm3)
3.0
2.5
2.0
1.5
1
0
***
***
**
***
Naive
Day5 Control
Vehicle
Anti-scl 30 mg/kg
anti-TNF 12 mg/kg
Anti-scl + anti-TNF
*** p<0.001 vs Day 29
**p<0.01

Figure 4C

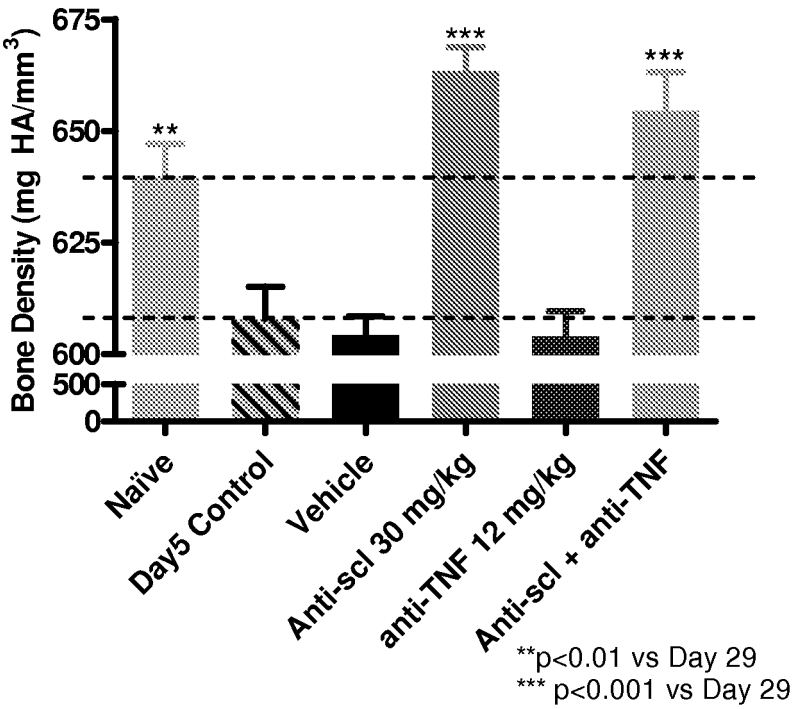

Bone Density (mg HA/mm3)
675
650
625
600
500
0
**
***
***
Naïve
Day5 Control
Vehicle
Anti-scl 30 mg/kg
anti-TNF 12 mg/kg
Anti-scl + anti-TNF
**p<0.01 vs Day 29
*** p<0.001 vs Day 29

Figure 5A

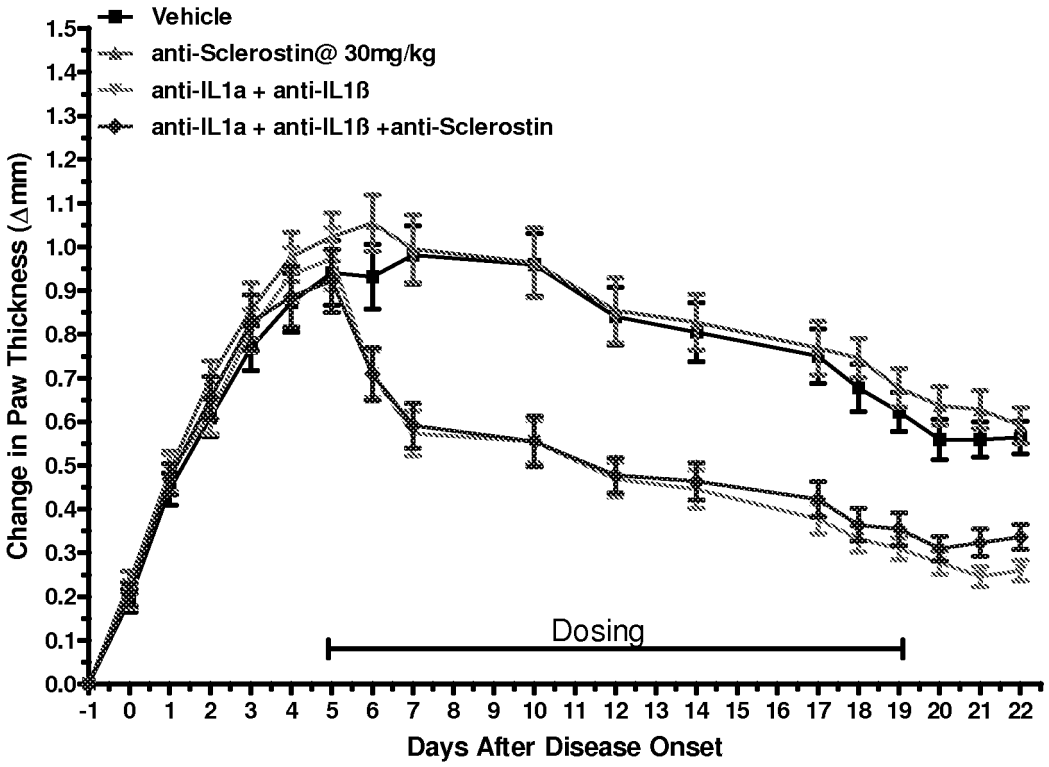

Vehicle
anti-Sclerostin@ 30mg/kg
anti-IL1a + anti-IL1ß
anti-IL1a + anti-IL1ß +anti-Sclerostin
Change in Paw Thickness (Δmm)
Dosing
Days After Disease Onset

Figure 5B

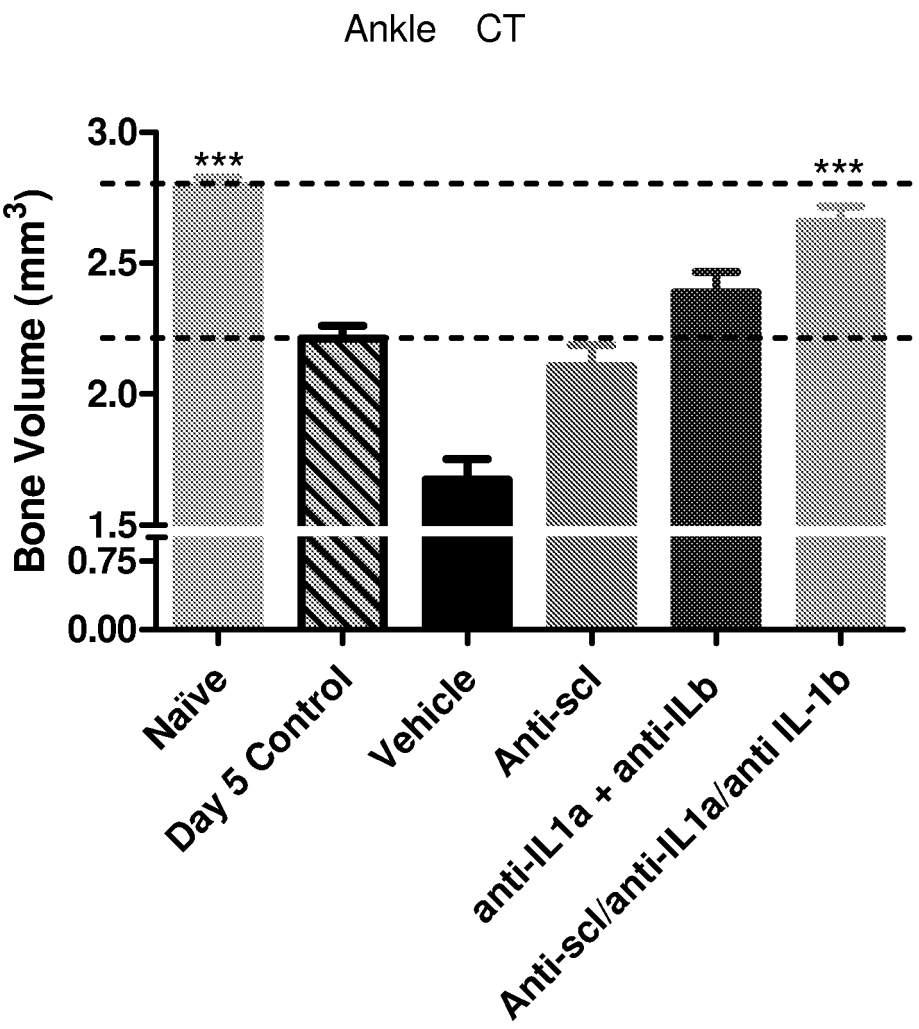
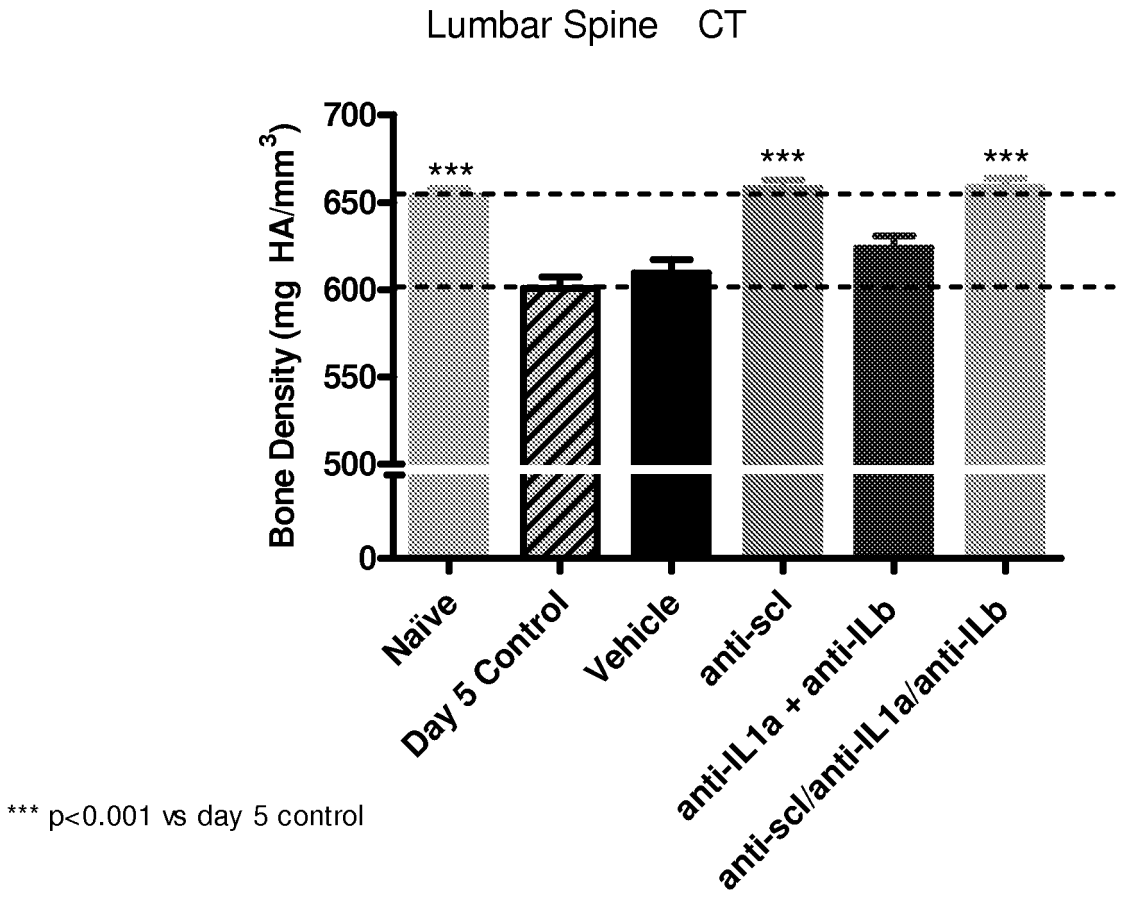

Ankle CT
Bone Volume (mm3)
3.0
2.5
2.0
1.5
0.75
0.00
***
***
Naïve
Day 5 Control
Vehicle
Anti-scl
anti-IL1a + anti-ILb
Anti-scl/anti-IL1a/anti IL-1b

Figure 5C



*** p<0.001 vs day 5 control

Figure 6A

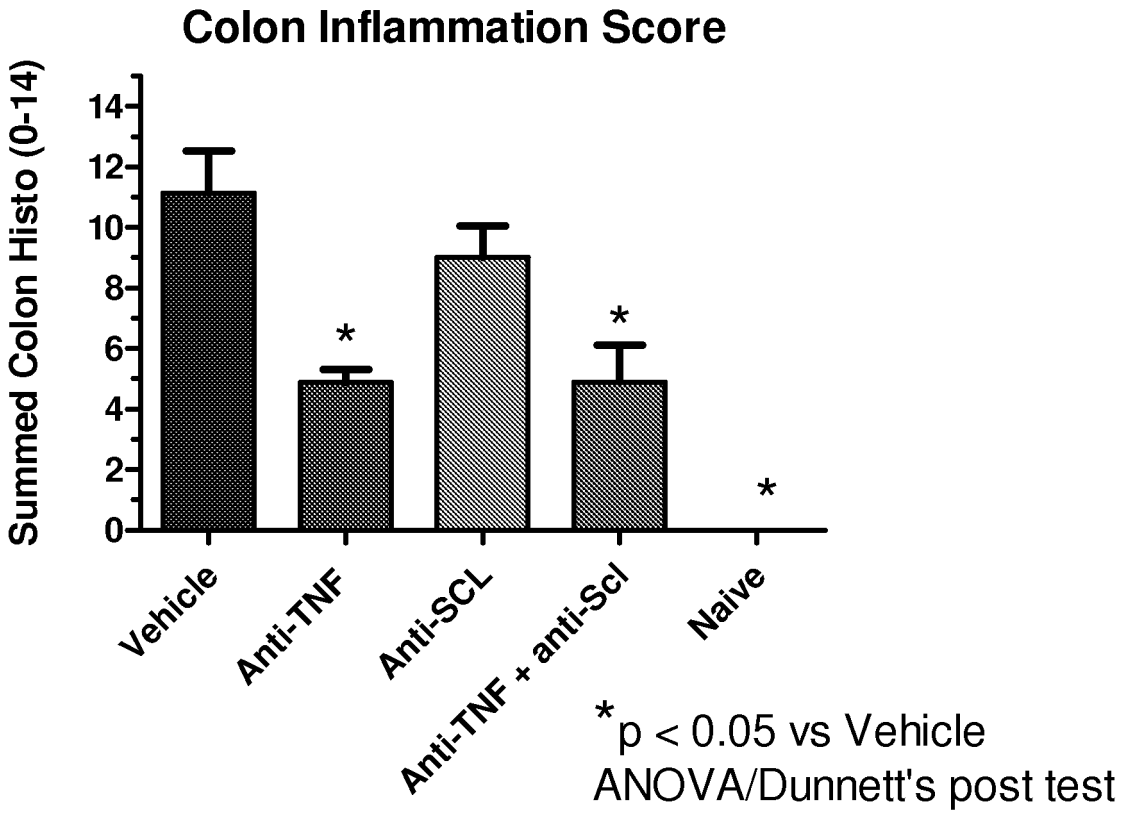

Colon Inflammation Score
Summed Colon Histo (0-14)
14
12
10
8
6
4
2
0
*
*
*
Vehicle
Anti-TNF
Anti-SCL
Anti-TNF + anti-Scl
Naive
*p < 0.05 vs Vehicle
ANOVA/Dunnett's post test

Figure 6B

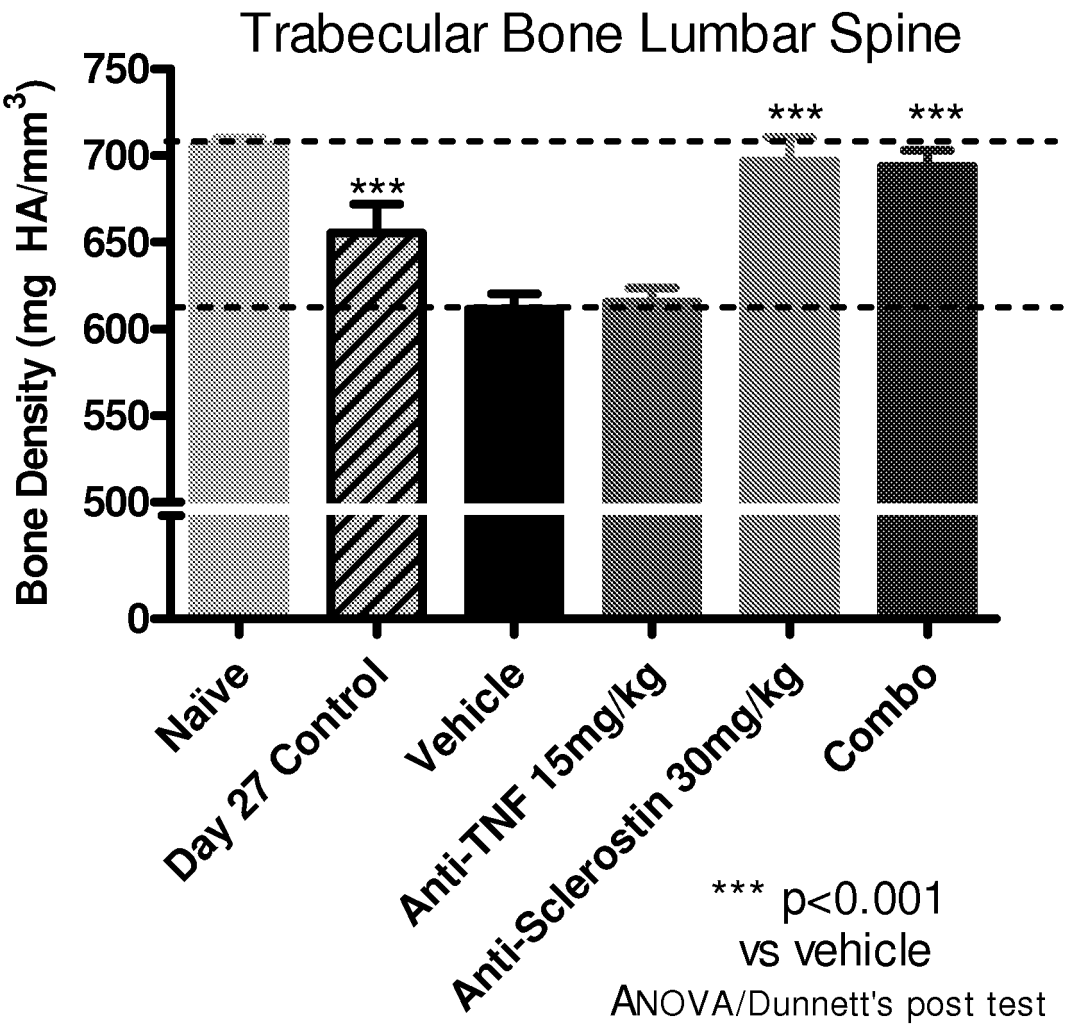

Trabecular Bone Lumbar Spine
Bone Density (mg HA/mm3)
750
700
650
600
550
500
0
***
***
***
Naïve
Day 27 Control
Vehicle
Anti-TNF 15mg/kg
Anti-Sclerostin 30mg/kg
Combo
*** p<0.001
vs vehicle
ANOVA/Dunnett's post test

Figure 7A

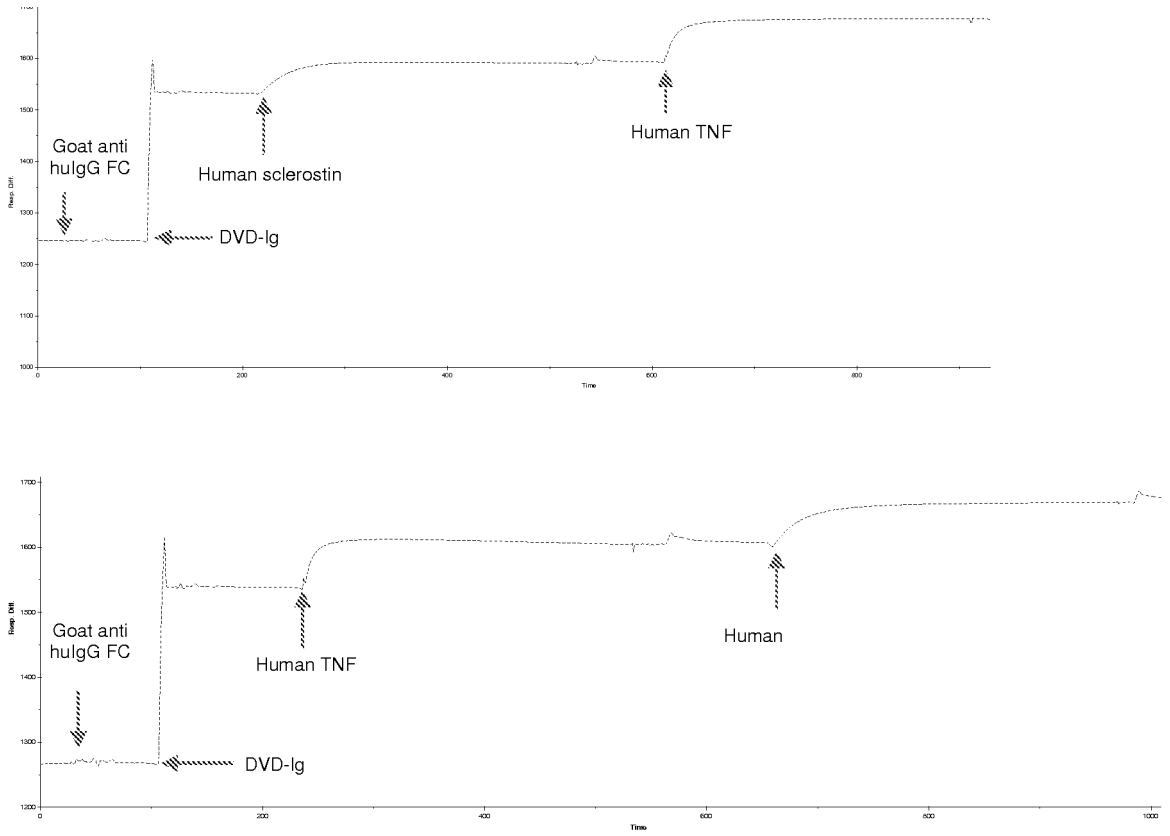
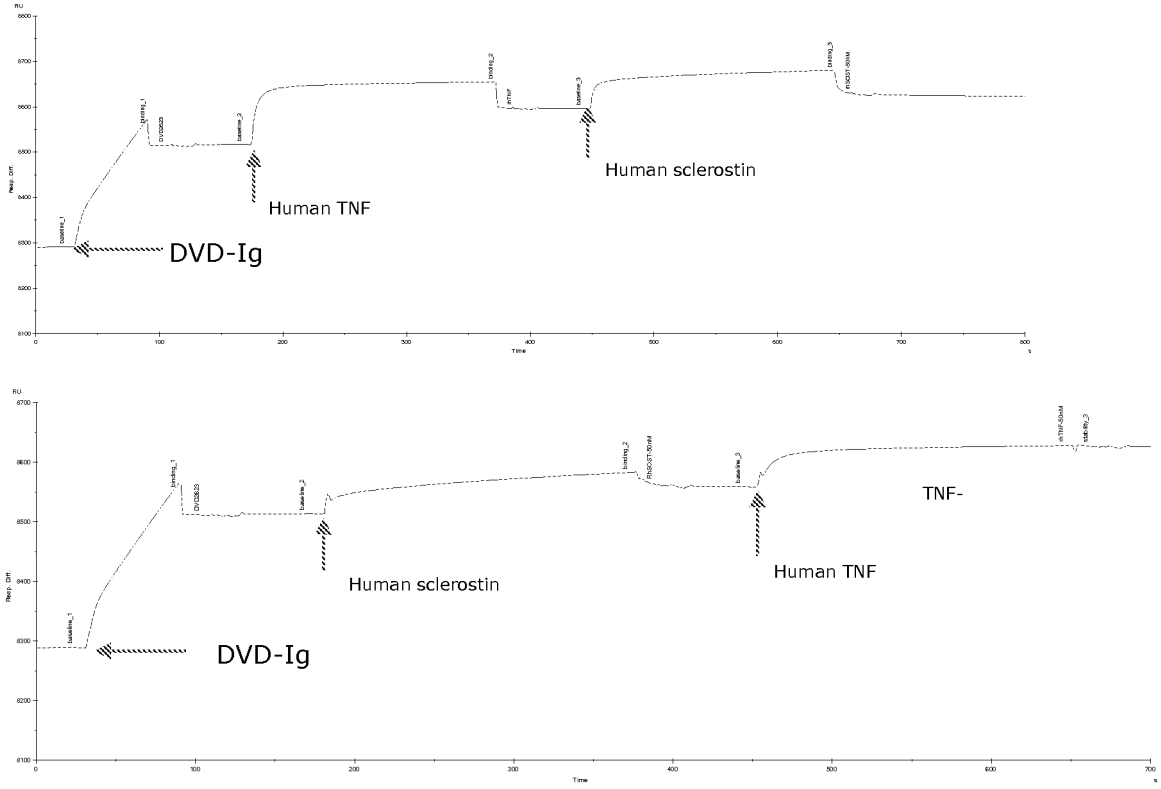

Goat anti
huIgG FC
Human sclerostin
DVD-Ig
Human TNF
Goat anti
huIgG FC
Human TNF
DVD-Ig
Human

Figure 7B


RU
Time
Human TNF
DVD-Ig
Human sclerostin
RU
Time
Human sclerostin
DVD-Ig
Human TNF
TNF-