

## CLAIMS

1. An anti-Sclerostin construct comprising an antibody moiety that specifically recognizes Sclerostin, wherein the antibody moiety binds to an epitope on Sclerostin, wherein the epitope comprises the amino acid sequence set forth in SEQ ID NO: 186.

2. An anti-Sclerostin construct comprising an antibody moiety that specifically recognizes Sclerostin, wherein the antibody moiety comprises a heavy chain variable region ( $V_H$ ) and a light chain variable region ( $V_L$ ), wherein:

— the  $V_H$  comprises a HC-CDR1 comprising the amino acid sequence of any one of SEQ ID NOs: 1-4 and 12, a HC-CDR2 comprising the amino acid sequence of any one of SEQ ID NOs: 5-8 and 13, and a HC-CDR3 comprising the amino acid sequence of any one of SEQ ID NOs: 9-11 and 14, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and

— the  $V_L$  comprises a LC-CDR1 comprising the amino acid sequence of any one of SEQ ID NOs: 15-17, 85, and 86, a LC-CDR2 comprising the amino acid sequence of any one of SEQ ID NOs: 18 and 19, and a LC-CDR3 comprising the amino acid sequence of any one of SEQ ID NOs: 20 and 21, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the

LC-CDRs;

preferably,

~~3. The anti-Sclerostin construct of claim 1 or claim 2,~~ wherein:

a) the  $V_H$  comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 12, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 13, and the HC-CDR3 comprising the amino acid sequence of SEQ ID

NO: 14; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15 or 16, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20, or

b) the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 9; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20;

preferably ~~4. The anti-Sclerostin construct of claim 1 or claim 2~~, wherein the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 6, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20;

preferably ~~5. The anti-Sclerostin construct of claim 1 or claim 2~~, wherein the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 2, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 7, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20;

preferably

~~6. The anti-Sclerostin construct of claim 1 or claim 2~~, wherein the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 2, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 6, and the

HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15,

the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOS: 20;  
preferably

~~7. The anti-Sclerostin construct of claim 1 or claim 2~~, wherein the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 16, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOS: 20;

~~8. The anti-Sclerostin construct of claim 1 or claim 2~~ preferably, wherein the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 3, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 7, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOS: 20;

preferably ~~9. The anti-Sclerostin construct of claim 1 or claim 2~~, wherein the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 16, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and

the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs:

20<sub>1</sub>:-

preferably 10. ~~The anti-Sclerostin construct of claim 1 or claim 2~~, wherein the

V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID

NO: 4,

the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 8, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 11; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 17, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 19, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 21;  
:-

preferably ~~11. — The anti-Sclerostin construct of claim 1 or claim 2,~~ wherein the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 9; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 85, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20;  
:-

preferably ~~12. — The anti-Sclerostin construct of claim 1 or claim 2,~~ wherein the V<sub>H</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 9; and the V<sub>L</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 86, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20;  
:- or:-

preferably ~~13. — An anti-Sclerostin construct comprising an antibody moiety that specifically recognizes Sclerostin,~~ wherein the antibody moiety comprises a

heavy chain variable region (V<sub>H</sub>) and a light chain variable region (V<sub>L</sub>).

comprising, ~~wherein~~:

a) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>H</sub> having the sequence set forth in SEQ ID NO: 22, and a LC-CDR1, a LC-CDR2, and a LC-

CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_L$  having the sequence set forth in SEQ ID NO: 23;

b) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_H$  having the sequence set forth in SEQ ID NO: 24, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_L$  having the sequence set forth in SEQ ID NO: 25;

c) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_H$  having the sequence set forth in SEQ ID NO: 26, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_L$  having the sequence set forth in SEQ ID NO: 27;

d) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_H$  having the sequence set forth in SEQ ID NO: 28, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_L$  having the sequence set forth in SEQ ID NO: 29;

e) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_H$  having the sequence set forth in SEQ ID NO: 30, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_L$  having the sequence set forth in SEQ ID NO: 31;

f) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_H$  having the sequence set forth in SEQ ID NO: 32, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the  $V_L$  having the sequence set forth in SEQ ID NO: 33;

g) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>H</sub> having the sequence set forth in SEQ ID NO: 34, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>L</sub> having the sequence set forth in SEQ ID NO: 35;

h) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>H</sub> having the sequence set forth in SEQ ID NO: 36, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>L</sub> having the sequence set forth in SEQ ID NO: 37;

i) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>H</sub> having the sequence set forth in SEQ ID NO: 38, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>L</sub> having the sequence set forth in SEQ ID NO: 39;

j) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>H</sub> having the sequence set forth in SEQ ID NO: 40, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>L</sub> having the sequence set forth in SEQ ID NO: 41;

k) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>H</sub>

having the sequence set forth in SEQ ID NO: 87, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>L</sub> having the sequence set forth in SEQ ID NO: 88;

1) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>H</sub> having the sequence set forth in SEQ ID NO: 87, and a LC-CDR1, a LC-CDR2, and a LC-

CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>L</sub> having the sequence set forth in SEQ ID NO: 89; or

m) a HC-CDR1, a HC-CDR2, and a HC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>H</sub> having the sequence set forth in SEQ ID NO: 87, and a LC-CDR1, a LC-CDR2, and a LC-CDR3, respectively comprising the amino acid sequences of a CDR1, a CDR2, and a CDR3 within the V<sub>L</sub> having the sequence set forth in SEQ ID NO: 90.

314. The anti-Sclerostin construct of ~~any one of claims 1-13~~ or claim 2, wherein the V<sub>H</sub> comprises an amino acid sequence of any one of SEQ ID NOs: 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, and 87, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and/or wherein the V<sub>L</sub> comprises an amino acid sequence of any one of SEQ ID NOs: 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, and 88-90 or a variant comprising an amino acid sequence having at least about 80% sequence identity;

preferably ~~15.~~ ~~The anti-Sclerostin construct of claim 14~~, wherein:

a) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 22, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 23, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

b) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 24, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 25, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

c) the  $V_H$  comprises an amino acid sequence of SEQ ID NO: 26, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the  $V_L$  comprises an amino acid sequence of SEQ ID NO: 27, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

d) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 28, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 29, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

e) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 30, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 31, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

f) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 32, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 33, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

g) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 34, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 35, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

h) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 36, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 37, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

i) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 38, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 39, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

j) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 40, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 41, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

k) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 87, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 88, or a variant comprising an amino acid sequence having at least about 80% sequence identity,

l) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 87, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 89, or a variant comprising an amino acid sequence having at least about 80% sequence identity, or

m) the V<sub>H</sub> comprises an amino acid sequence of SEQ ID NO: 87, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and the V<sub>L</sub> comprises an amino acid sequence of SEQ ID NO: 90, or a variant comprising an amino acid sequence having at least about 80% sequence identity.

~~164.~~ ~~An~~ The anti-Sclerostin construct ~~comprising an antibody moiety of any one of claims 1-3 that specifically recognizes Sclerostin~~, wherein the antibody moiety is a humanized antibody moiety derived from an anti-Sclerostin antibody comprising a heavy chain variable region (V<sub>H</sub>) and a second light chain variable region (V<sub>L</sub>), wherein:

a) the V<sub>H</sub> comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 9, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and the V<sub>L</sub> comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, a LC-CDR2 comprising the amino acid sequence

of SEQ ID NO: 18, and a LC-CDR3 comprising the amino acid sequence of ~~any-~~  
~~one of~~ SEQ ID NOs: 20, or a variant thereof comprising up to 5, 4, 3, 2, or 1  
amino acid substitutions in the LC-CDRs;

b) the  $V_H$  comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 6, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and the  $V_L$  comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and a LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs;

c) the  $V_H$  comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 2, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 7, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and the  $V_L$  comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and a LC-CDR3 comprising the amino acid sequence of ~~any one of~~ — SEQ ID NOs: 20, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs;

d) the  $V_H$  comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 3, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 6, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and the  $V_L$  comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and a LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs;

e) the  $V_H$  comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 199, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and the  $V_L$  comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 16, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and a LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs;

f) the  $V_H$  comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 3, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 200, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and the  $V_L$  comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 15, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and a LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs;

g) the  $V_H$  comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 199, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 10, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and the  $V_L$  comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 16, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and a LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 20, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs; or

h) the V<sub>H</sub> comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 4, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 8, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 11, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; and the V<sub>L</sub> comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 17, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 19, and a LC-CDR3 comprising the amino acid sequence of ~~any one of~~ SEQ ID NOs: 21, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

~~175.~~ The anti-Sclerostin construct of any one of claims 1-~~16~~4, wherein the antibody moiety is an antibody or antigen-binding fragment thereof selected from the group consisting of a full-length antibody, a bispecific antibody, a single-chain Fv (scFv) fragment, a Fab fragment, a Fab' fragment, a F(ab')<sub>2</sub>, an Fv fragment, a disulfide stabilized Fv fragment (dsFv), a disulfide stabilized scFv (dsscFv), a (dsFv)<sub>2</sub>, a Fv-Fc fusion, a scFv-Fc fusion, a scFv-Fv fusion, a diabody, a tribody, and a tetrabody~~;~~;

preferably~~18.~~ ~~The anti-Sclerostin construct of any one of claims 1-17,~~ wherein the construct is a full-length antibody comprising an Fc fragment~~;~~;

preferably~~19.~~ ~~The anti-Sclerostin construct of claim 17,~~ wherein the antibody moiety is a scFv fragment~~;~~; or~~;~~

preferably~~20.~~ ~~The anti-Sclerostin construct of any one of claims 1-19,~~ wherein the Sclerostin is a human Sclerostin.

~~216.~~ The anti-Sclerostin construct of any one of claims 1-~~17 and 19-20~~5, wherein the anti-Sclerostin construct further comprises a second moiety~~;~~;

preferably~~22.~~—~~The anti-Sclerostin construct of claim 21,~~ wherein the second moiety comprises a second antibody moiety that specifically recognizes an antigen; or:-

preferably~~23.~~—~~The anti-Sclerostin construct of claim 22,~~ wherein the second antibody moiety comprises a second heavy chain variable region ( $V_{H-2}$ ) and a light chain variable region ( $V_{L-2}$ ).

~~24~~7. The anti-Sclerostin construct of claim ~~22 or claim 23~~6, wherein the antigen is DKK1;:-

preferably~~25.~~—~~The anti-Sclerostin construct of claim 24,~~ wherein the DKK1 is a human DKK1;:-

preferably~~26.~~—~~The anti-Sclerostin construct of claim 24 or claim 25,~~ wherein the second antibody moiety competes for a binding epitope of DKK1 with a third antibody moiety comprising a third heavy chain variable region ( $V_{H-3}$ ) and a third light chain variable region ( $V_{L-3}$ ), wherein:

a) the  $V_{H-3}$  comprising a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 42, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 43, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 44, and the  $V_{L-3}$  comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 45, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 46, and a LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 47;

b) the  $V_{H-3}$  comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 48, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 49, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 50, and the  $V_{L-3}$  comprises a LC-CDR1 comprising the amino acid

sequence of SEQ ID NO: 51, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 52, and a LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 58; or

c) the  $V_{H-3}$  comprises a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 54, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 55, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 56, and the  $V_{L-3}$  comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 57, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 58, and a LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 59;

~~27. — The anti-Sclerostin construct of claim 26~~ preferably, wherein the  $V_{H-2}$  comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 42, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 43, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 44, and the  $V_{L-2}$  comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 45, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 46, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 47;

~~28. — The anti-Sclerostin construct of claim 26~~ preferably, wherein the  $V_{H-2}$  comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 48, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 49, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 50, and the  $V_{L-2}$  comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 51, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 52, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 58;

~~29. — The anti-Sclerostin construct of claim 26~~ preferably, wherein the  $V_{H-2}$  comprising the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 54, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 55, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 56, and the

V<sub>L-2</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 57, the LC-CDR2

comprising the amino acid sequence of SEQ ID NO: 58, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 59.

~~308.~~ The anti-Sclerostin construct of claim ~~22 or claim 23~~<sup>6</sup>, wherein the antigen is RANKL<sub>1</sub>;

~~preferably~~<sup>31.</sup> ~~The anti-Sclerostin construct of claim 30~~, wherein the antigen is human RANKL<sub>1</sub>;

~~preferably~~<sup>32.</sup> ~~The anti-Sclerostin construct of claim 30 or claim 31~~, wherein the second antibody moiety competes for a binding epitope of RANKL with a third antibody moiety comprising a third heavy chain variable region (V<sub>H-3</sub>) and a third light chain variable region (V<sub>L-3</sub>), wherein the V<sub>H-3</sub> comprising a HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 66, a HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 67, and a HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 68, and the V<sub>L-3</sub> comprises a LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 69, a LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 70, and a LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 71; ~~or~~;

~~preferably~~<sup>33.</sup> ~~The anti-Sclerostin construct of claim 31~~, wherein the V<sub>H-2</sub> comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 66, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 67, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 68, and the V<sub>L-2</sub> comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 69, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 70, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 71.

[349](#). The anti-Sclerostin construct of any one of claims ~~22-33~~[6-8](#), wherein the second antibody moiety is a full-length antibody, a Fab, a Fab', a (Fab')<sub>2</sub>, an Fv, a single chain Fv (scFv) fragment, an scFv-scFv, a minibody, a diabody, or an sdAb<sub>1</sub>;

[preferably35](#). ~~The anti-Sclerostin construct of claim 34~~, wherein the second antibody moiety is a full-length antibody comprising two heavy chains, two light chains and a Fc fragment, and wherein the anti-Sclerostin antibody moiety is a single chain Fv (scFv) fragment comprising the V<sub>H</sub> fused with the V<sub>L</sub><sub>1</sub>;

[preferably36](#). ~~The anti-Sclerostin construct of claim 35~~, wherein the anti-Sclerostin antibody moiety is fused to one or both of the heavy chains of the full-length antibody<sub>1</sub>;

[preferably37](#). ~~The anti-Sclerostin construct of any one of claims 34-36~~, wherein the anti-Sclerostin antibody moiety is fused to one or both of the light chains of the full-length antibody<sub>1</sub>;

[preferably38](#). ~~The anti-Sclerostin construct of claim 36 or 37~~, wherein the anti-Sclerostin antibody moiety is fused to N-terminus of the one or both of the heavy chains or light chains of the full-length antibody<sub>1</sub>;

[preferably39](#). ~~The anti-Sclerostin construct of any one of claims 36-38~~, wherein the anti-Sclerostin antibody moiety is fused to C-terminus of the one or both of the heavy chains or light chains of the full-length antibody<sub>1</sub>;

[preferably40](#). ~~The anti-Sclerostin construct of any one of claims 36-39~~, wherein the anti-Sclerostin antibody moiety is fused to the full-length antibody via a first linker<sub>1</sub>;

preferably 41. ~~The anti-Sclerostin construct of any one of claims 36-39,~~  
wherein the anti-Sclerostin antibody moiety is fused to the full-length antibody  
without a linker~~;~~

preferably 42. — ~~The anti-Sclerostin construct of claim 40,~~ wherein the first linker is a GS linker selected from the group consisting of SEQ ID NOs: 74-84;<sub>1</sub>

preferably 43. — ~~The anti-Sclerostin construct of any one of claims 35-42,~~ wherein the V<sub>H</sub> is fused with the V<sub>L</sub> via a second linker;<sub>1</sub>

preferably 44. — ~~The anti-Sclerostin construct of claim 43,~~ wherein the scFv fragment comprises, from N-terminus to C-terminus, the V<sub>H</sub>, the second linker, and the V<sub>L</sub>;<sub>1</sub>

preferably 45. — ~~The anti-Sclerostin construct of claim 43,~~ wherein the scFv fragment comprises, from N-terminus to C-terminus, the V<sub>L</sub>, the second linker, and the V<sub>H</sub>, and optionally a C-terminal alanine residue;<sub>1</sub> or

preferably 46. — ~~The anti-Sclerostin construct of any one of claims 43-45,~~ wherein the second linker comprises an amino acid sequence of SEQ ID NO: 76 or 77.

4710. The anti-Sclerostin construct of any one of claims ~~23-33~~6-8, wherein the second antibody moiety is a scFv fragment comprising the V<sub>H-2</sub> and the V<sub>L-2</sub>, and wherein the anti-Sclerostin antibody moiety is a full-length antibody comprising two heavy chains, two light chains and a Fc fragment;<sub>1</sub>

preferably 48. — ~~The anti-Sclerostin construct of claim 46,~~ wherein the second antibody moiety is fused to both of the heavy chains of the full-length antibody;<sub>1</sub>

preferably 49. — ~~The anti-Sclerostin construct of claim 47 or 48,~~ wherein the second antibody moiety is fused to both of the light chains of the full-length antibody;<sub>1</sub>

preferably<sup>50</sup>. — ~~The anti-Sclerostin construct of claim 48 or 49~~, wherein the second antibody moiety is fused to N-terminus of the both of the heavy chains or light chains of the full-length antibody<sub>1</sub>:-

preferably~~51.~~ — ~~The anti-Sclerostin construct of any one of claims 47-50,~~  
wherein the second antibody moiety is fused to C-terminus of the both of the  
heavy chains or light chains of the full-length antibody;~~i~~:-

preferably~~52.~~ — ~~The anti-Sclerostin construct of any one of claims 47-51,~~  
wherein the second antibody moiety is fused to the full-length antibody *via* a  
first linker;~~i~~:-

preferably ~~53.~~ — ~~The anti-Sclerostin construct of any one of claims 47-51,~~  
wherein the second antibody moiety is fused to the full-length antibody without  
a linker;~~i~~:-

preferably~~54.~~ — ~~The anti-Sclerostin construct of claim 52,~~ wherein the first  
linker is a GS first linker selected from the group consisting of SEQ ID NOs:  
74-84;~~i~~:-

preferably ~~55.~~ — ~~The anti-Sclerostin construct of any one of claims 47-54,~~  
wherein the V<sub>H-2</sub> is fused with the V<sub>L-2</sub> *via* a second linker;~~i~~:-

preferably, ~~56.~~ — ~~The anti-Sclerostin construct of any one of claims 47-54,~~  
wherein the V<sub>H-2</sub> is fused with the V<sub>L-2</sub> without a linker;~~i~~:-

preferably~~57.~~ — ~~The anti-Sclerostin construct of claim 55,~~ wherein the scFv  
fragment comprises, from N-terminus to C-terminus, the V<sub>H-2</sub>, the second linker,  
and the V<sub>L-2</sub>;~~i~~:-

preferably~~58.~~ — ~~The anti-Sclerostin construct of claim 55,~~ wherein the scFv  
fragment comprises, from N-terminus to C-terminus, the V<sub>L-2</sub>, the second linker,  
and the V<sub>H-2</sub>, and optionally a C-terminal alanine residue;or:-

preferably 59. ~~The anti-Sclerostin construct of any one of claims 55 and 57-58,~~ wherein the second linker comprises an amino acid sequence of SEQ ID NO: 76 or 77.

~~60~~11. The anti-Sclerostin construct of ~~any one of claims 35-59~~9 or claim 10, wherein the scFv is a disulfide stabilized scFv (“dsscFv”);~~;~~

preferably 61. — ~~The anti-Sclerostin construct of claim 60,~~ wherein the dsscFv comprises a) a G44C mutation in the V<sub>H</sub> or V<sub>H-2</sub> according to the numbering of SEQ ID NO: 60, and b) a G100C mutation in the V<sub>L</sub> or V<sub>L-2</sub> according to the numbering of SEQ ID NO: 61.

6212. The anti-Sclerostin construct of any one of claims ~~35-61~~9-11, wherein the construct comprises:

- 1) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 91, and two light chains each comprising the amino acid sequence of SEQ ID NO: 93;
- 2) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 92, and two light chains each comprising the amino acid sequence of SEQ ID NO: 93;
- 3) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 94, and two light chains each comprising the amino acid sequence of SEQ ID NO: 96;
- 4) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 95, and two light chains each comprising the amino acid sequence of SEQ ID NO: 96;
- 5) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 97, and two light chains each comprising the amino acid sequence of SEQ ID NO: 99;
- 6) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 98, and two light chains each comprising the amino acid sequence of SEQ ID NO: 99;

7) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 100, and two light chains each comprising the amino acid sequence of SEQ ID NO: 102;

8) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 101, and two light chains each comprising the amino acid sequence of SEQ ID NO: 102;

9) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 103, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 104;

10) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 103, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 105;

11) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 106, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 107;

12) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 106, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 108;

13) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 109, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 110;

14) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 109, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 111;

15) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 112, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 113;

16) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 112, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 114;

17) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 115, and two light chains each comprising the amino acid sequence of SEQ ID NO: 119;

18) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 116, and two light chains each comprising the amino acid sequence of SEQ ID NO: 119;

19) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 117, and two light chains each comprising the amino acid sequence of SEQ ID NO: 119;

20) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 118, and two light chains each comprising the amino acid sequence of SEQ ID NO: 119;

21) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 120, and two light chains each comprising the amino acid sequence of SEQ ID NO: 122;

22) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 121, and two light chains each comprising the amino acid sequence of SEQ ID NO: 122;

23) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 123, and two light chains each comprising the amino acid sequence of SEQ ID NO: 125;

24) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 124, and two light chains each comprising the amino acid sequence of SEQ ID NO: 125;

25) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 126, and two light chains each comprising the amino acid sequence of SEQ ID NO: 129;

26) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 127, and two light chains each comprising the amino acid sequence of SEQ ID NO: 129;

27) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 128, and two light chains each comprising the amino acid sequence of SEQ ID NO: 129;

28) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 133, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 130;

29) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 133, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 131;

30) two heavy chains each comprising the amino acid sequence of SEQ ID NO: 133, and two light chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 132;

31) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 177, and two light chains each comprising the amino acid sequence of SEQ ID NO: 125;

32) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 178, and two light chains each comprising the amino acid sequence of SEQ ID NO: 125;

33) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 178, and two light chains each comprising the amino acid sequence of SEQ ID NO: 122;

34) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 179, and two light chains each comprising the amino acid sequence of SEQ ID NO: 122; or

35) two heavy chains fused with the anti-Sclerostin or second antibody moiety each comprising the amino acid sequence of SEQ ID NO: 180, and two light chains each comprising the amino acid sequence of SEQ ID NO: 122.

~~63~~13. The anti-Sclerostin construct of any one of claims ~~23-33~~6-8, wherein the construct comprises:

a) a first polypeptide comprising a first light chain comprising, from N-terminus to C-terminus, i) the V<sub>L</sub>, ii) a first light chain constant domain (“first CL domain”);

b) a second polypeptide comprising a first heavy chain comprising, from N-terminus to C-terminus, i) the V<sub>H</sub>, ii) a first heavy chain constant domain (“first CH1 domain”), and iii) a first Fc domain;

c) a third polypeptide comprising a second heavy chain comprising, from N-terminus to C-terminus, i) the V<sub>H-2</sub>, ii) a second heavy chain constant domain (“second CH1 domain”), and iii) a second Fc domain; and

d) a fourth polypeptide comprising a second light chain comprising, from N-terminus to C-terminus, i) the V<sub>L-2</sub>, ii) a second light chain constant domain (“second CL domain”),

wherein the first and the second Fc domains form an Fc fragment;

~~64~~preferably 64. ~~The anti-Sclerostin construct of claim 63~~, wherein one of the first and the second Fc domains comprises a T366W mutation, and optionally a S354C mutation, and wherein the other Fc domain comprises a T366S mutation, a L368A mutation, a Y407V mutation, and optionally a Y349C mutation, wherein numbering is according to the EU index;

preferably<sup>65</sup>. — ~~The anti-Sclerostin construct of claim 63 or claim 64~~, wherein either i) the first CH1 domain and the first CL domain or ii) the second CH1 domain and the second CL domain ~~are~~<sup>is</sup> selected from the group consisting of:

a) a CH1 domain wherein the amino acid at position 141 is substituted for cysteine and the cysteine at position 131 or 220 is substituted for a non-cysteine amino acid; and a CL domain wherein the amino acid at position 116 is substituted for cysteine and the cysteine at position 214 is substituted for a non-cysteine amino acid;

b) a CH1 domain wherein the amino acid at position 168 is substituted for cysteine and the cysteine at position 131 or 220 is substituted for a non-cysteine amino acid; and a CL domain wherein the amino acid at position 164 is substituted for cysteine and the cysteine at position 214 is substituted for a non-cysteine amino acid;

c) a CH1 domain wherein the amino acid at position 126 is substituted for cysteine and the cysteine at position 131 or 220 is substituted for a non-cysteine amino acid; and a CL domain wherein the amino acid at position 121 is substituted for cysteine and the cysteine at position 214 is substituted for a non-cysteine amino acid;

d) a CH1 domain wherein the amino acid at position 128 is substituted for cysteine and the cysteine at position 131 or 220 is substituted for a non-cysteine amino acid; and a CL domain wherein the amino acid at position 118 is substituted for cysteine and the cysteine at position 214 is substituted for a non-cysteine amino acid;

e) a CH1 domain wherein the amino acid at position 170 is substituted for cysteine and the cysteine at position 131 or 220 is substituted for a non-cysteine amino acid; and a CL domain wherein the amino acid at position

176 is substituted for cysteine and the cysteine at position 214 is substituted for a non-cysteine amino acid;

f) a CH1 domain wherein the amino acid at position 171 is substituted for cysteine and the cysteine at position 131 or 220 is substituted for a non-cysteine amino acid; and a CL domain wherein the amino acid at position 162 is substituted for cysteine and the cysteine at position 214 is substituted for a non-cysteine amino acid;

g) a CH1 domain wherein the amino acid at position 173 is substituted for cysteine and the cysteine at position 131 or 220 is substituted for a non-cysteine amino acid; and a CL domain wherein the amino acid at position 160 is substituted for cysteine and the cysteine at position 214 is substituted for a non-cysteine amino acid;

wherein numbering is according to the EU index;

preferably, ~~66. The the~~ anti-Sclerostin construct ~~of any of claims 63-65,~~ comprising:

1) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 135, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 134, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 136, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 137;

2) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 135, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 134, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 138, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 139;

3) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 135, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 134, the third polypeptide comprises the amino acid sequence of SEQ ID NO:

140, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 141;

4) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 135, the second polypeptide comprises the amino acid sequence of SEQ ID NO:

134, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 142, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 143;

5) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 135, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 134, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 144, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 145;

6) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 146, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 148, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 149;

7) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 146, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 150, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 151;

8) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 146, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 152, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 153;

9) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 146, the third polypeptide comprises the amino acid sequence of SEQ ID

NO: 154, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 155;

10) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 146, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 156, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 157;

11) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO:

146, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 158, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 159;

12) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 146, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 160, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 161;

13) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 146, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 162, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 163;

14) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 171, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 172, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 163;

15) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 173, the third polypeptide comprises the amino acid sequence of SEQ ID NO: 174, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 163;

16) the first polypeptide comprises the amino acid sequence of SEQ ID NO: 147, the second polypeptide comprises the amino acid sequence of SEQ ID NO: 175, the third polypeptide comprises the amino acid sequence of SEQ ID

NO: 176, and the fourth polypeptide comprises the amino acid sequence of SEQ ID NO: 163.

~~67~~14. The anti-Sclerostin construct of claim ~~21~~6, wherein the second moiety comprises a half-life extending moiety;

preferably 68. ~~The anti-Sclerostin construct of claim 67~~, wherein the half-life extending moiety is an Fc fragment.

1569. The anti-Sclerostin construct of any one of claims 185, and 35-669-13-~~and 68~~, wherein the Fc fragment is selected from the group consisting of Fc fragments from IgG, IgA, IgD, IgE, IgM, and combinations and hybrids thereof;

preferably70. ~~The anti-Sclerostin construct of claim 69~~, wherein the Fc fragment is selected from the group consisting of Fc fragments from IgG1, IgG2, IgG3, IgG4, and combinations and hybrids thereof;

preferably71. ~~The anti-Sclerostin construct of claim 69 or claim 70~~, wherein the Fc fragment comprises a H435R mutation and an Y436F mutation;

preferably72. ~~The anti-Sclerostin construct of any of claims 69-71~~, wherein the Fc fragment has a reduced effector function as compared to the corresponding wildtype Fc fragment; or -

preferably73. ~~The anti-Sclerostin construct of any of claims 69-71~~, wherein the Fc fragment has:

- a) an enhanced effector function as compared to the corresponding wildtype Fc fragment, and/or
- b) an enhanced FcRn binding affinity as compared to the corresponding wildtype Fc fragment.

7416. The anti-Sclerostin construct of claim 216, wherein the construct is an antibody-drug conjugate or antibody fusion protein;

preferably75. ~~The anti-Sclerostin construct of claim 74~~, wherein the second moiety comprises an agent or agents selected from the group consisting of a parathyroid hormone (PTH), a selective estrogen receptor modulator (SERM), a

bisphosphonate, a prostaglandin E (PGE) receptor agonist, VEGF, TGF $\beta$ , growth factor (myostatin), calcitonin, and combinations thereof.

~~76~~17. An anti-Sclerostin construct that specifically binds to Sclerostin competitively with the anti-Sclerostin construct of any one of claims 1-~~75~~16.

~~77~~18. A pharmaceutical composition comprising the anti-Sclerostin construct of any one of claims 1-~~76~~17 and a pharmaceutically acceptable carrier;

preferably~~78. The pharmaceutical composition of claim 77,~~ wherein the composition further comprises an agent or agents selected from the group consisting of a parathyroid hormone (PTH), a selective estrogen receptor modulator (SERM), VEGF, and TGF $\beta$ , growth factor (myostatin), calcitonin, and combinations thereof.

~~79~~19. An isolated nucleic acid encoding the anti-Sclerostin construct of any one of claims 1-~~17~~76.

~~80~~20. A vector comprising the isolated nucleic acid of claim ~~19~~79.

~~81~~21. An isolated host cell comprising the isolated nucleic acid of claim ~~79~~19, or the vector of claim ~~80~~20.

~~82~~22. A method of producing an anti-Sclerostin construct comprising:

- a) culturing the isolated host cell of claim ~~81~~21 under conditions effective to express the anti-Sclerostin construct or a portion thereof; and
- b) obtaining the expressed anti-Sclerostin construct or a portion thereof from the host cell.

~~83~~23. ~~A method of treating and/or preventing a disease or condition in an individual, comprising administering to the individual an effective mount~~ Use of the anti-Sclerostin construct of any one of claims 1-~~17~~76, and/or the pharmaceutical composition of claim ~~77 or claim 78~~18 characterized by being in

the manufacture of a medicament for treating and/or preventing a disease or condition in an individual, wherein the medicament is administered an effective mount to the individual;

preferably84. — ~~The method of claim 83~~, wherein the disease or condition is a bone-related disorder or cartilage related disorder, a bone marrow or haematological disorder, a musculoskeletal rare disease, a muscle-related disorder, or a cancer;:-

preferably 85. — ~~The method of claim 84~~, wherein the bone-related disorder is osteogenesis imperfecta, osteoporosis or osteopenia (in men and women), osteonecrosis, delay bone healing, non-union bone fractures, multiple myeloma, multiple myeloma related bone disorders, primary bone tumor, bone metastasis of malignancies, inflammatory or infectious bone disease, osteomalacia, hypercalcemia, Paget's disease, immobilization-induced bone loss, glucocorticoid-induced bone loss, inflammation-induced bone loss including arthritis-induced bone loss, spaceflight osteoporosis/osteopenia and bone loss caused by reduced gravity or other disease or condition associated with a) bone loss of either quantity or quality or both and/or b) abnormality of bone structure and quality;:-

preferably86. — ~~The method of claim 85~~, wherein the bone-related disorder is osteoporosis or osteopenia;:-

preferably87. — ~~The method of claim 85~~, wherein the bone-related disorder is osteogenesis imperfecta;:-

preferably88. — ~~The method of claim 85~~, wherein the bone-related disorder is multiple myeloma and multiple myeloma related bone disorders;:-

preferably89. — ~~The method of claim 84~~, wherein the cartilage disorder is chondromatosis, chondrodysplasia, achondroplasia, epiphyseal dysplasia, chondrodystrophic myotonia, juxtacortical chondroma, tear of cartilage of knee,

osteofibrous dysplasia, osteoarthritis, osteogenesis imperfecta,  
hypophosphatemic rickets or osteochondrodystrophy.

preferably<sup>90</sup>. ~~The method of claim 84~~, wherein the muscle-related disorder is sarcopenia and cancer sarcopenia.

~~9124. A method of facilitation of heal after bone or joint surgeries in an individual, comprising administering to the individual an effective mount of Use~~  
~~of~~ the anti-Sclerostin construct of any one of claims 1-~~76~~<sup>17</sup>, and/or the pharmaceutical composition of claim ~~77 or claim 78~~<sup>18</sup> characterized by being in the manufacture of a medicament for facilitating heal after bone or joint surgeries in an individual, wherein the medicament is administered an effective mount to the individual.

~~9225.~~ The ~~method-use~~ of ~~any one of claims 83-91~~<sup>23</sup> or claim 24, wherein the anti-Sclerostin construct is administered by subcutaneous injection, intravenous injection, intramuscular injection or administered orally or parenterally into the individual.

~~9326.~~ The ~~method-use~~ of any one of claims ~~83-92~~<sup>23-25</sup>, wherein the method further comprises administering a second agent or therapy<sub>;</sub>

preferably<sup>94</sup>. ~~The method of claim 93~~, wherein the second agent or therapy comprises an anti-DKK1 antibody<sub>;</sub>

preferably<sup>95</sup>. ~~The method of claim 93~~, wherein the second agent or therapy comprises an anti-RANKL antibody<sub>;</sub>

preferably<sup>96</sup>. ~~The method of claim 93~~, wherein the second agent or therapy comprises an agent selected from the group consisting of a parathyroid hormone (PTH), a selective estrogen receptor modulator (SERM), a bisphosphonate, a prostaglandin E (PGE) receptor agonist, VEGF, TGF $\beta$ , growth factor (myostatin) and calcitonin.

9727. The ~~method~~use of any one of claims ~~83-96~~23-26, wherein the individual is a human.