

CLAIMS

1. An anti-CD93 construct comprising an antibody moiety comprising a heavy chain variable region (V_H) and a light chain variable region (V_L), wherein the antibody moiety competes for a binding epitope of CD93 with an antibody or antibody fragment comprising a second heavy chain variable region (V_{H-2}) and a second light chain variable region (V_{L-2}), wherein:

~~—— a) the V_{H-2} comprising 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: 2, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 3, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 4, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 6;~~

~~—— b) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 17, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 19, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 20, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 21, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 22;~~

~~—— c) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 33, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 36, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 37, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 38;~~

~~d) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 49, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 50, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 51, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 52, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 53, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 54;~~

~~e) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 65, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 66, and the HC-~~

CDR3 comprising the amino acid sequence of SEQ ID NO: 67, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 68, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 69, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 70;

f) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 81, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 82, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 83, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 84, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 85, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 86;

g) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 97, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 98, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 99, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 100, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 101, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 102;

h) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 113, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 114, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 115, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 116, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 117, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 118;

i) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 129, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 130, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 131, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 132, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 133, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 134;

j) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 145, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 146, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 147, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 148, 355, or 358, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 149 or 356, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 150, 357 or 359;

k) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 161, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 162, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 163, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 164, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 165, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 166;

l) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 177, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 178, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 179, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 180 or 353, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 181 or 354, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 182;

m) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 193, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 194, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 195, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 196, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 197, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 198;

n) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 209, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 210, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 211, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 212, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 213, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 214;

o) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 289, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 290, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 291, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 292, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 293, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 294; or,

p) the V_{H-2} comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 17 or 304, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18 or 305, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 19, and the V_{L-2} comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 20, 301, 302,

303, or 306, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 21, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 22.

2. ~~The anti-CD93 construct of claim 1, wherein:~~

a) ~~the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 2, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 3, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 4, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 6, 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 i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 17, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 19, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 20, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 21, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 22, 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 i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 33, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 36, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 37, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 38, 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 i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 49, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 50, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 51, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 52, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 53, and iii) the LC-CDR3~~

comprising the amino acid sequence of SEQ ID NO: 54, 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 i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 65, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 66, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 67, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 68, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 69, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 70, 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 i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 81, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 82, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 83, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 84, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 85, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 86, 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 i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 97, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 98, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 99, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 100, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 101, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 102, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs,

h) the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 113, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 114, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 115, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 116, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 117, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 118, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs,

i) the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 129, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 130, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 131, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 132, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 133, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 134, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs,

j) the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 145, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 146, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 147, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 148, 355, or 358, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 149 or 356, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 150, 357 or 359, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs,

k) the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 161, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 162, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 163, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 164, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 165, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 166, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs,

l) the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 177, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 178, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 179, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 180 or 353, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 181 or 354, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 182, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs,

m) the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 193, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 194, and iii)

the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 195, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 196, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 197, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 198, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs, or

n) the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 209, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 210, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 211, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 212, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 213, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 214, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs,

o) the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 289, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 290, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 291, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 292, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 293, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 294, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs, or

p) the V_H comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 17 or 304, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18 or 305, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 19, and the V_L comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 20, 301, 302, 303, or 306, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 21, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 22.

3.——The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 1, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 2, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 3, 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 i) the LC-CDR1 comprising the amino

acid sequence of SEQ ID NO: 4, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 5, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 6, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

4. — The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 17 or 304, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 18 or 305, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 19, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 20, 301, 302, 303, or 306, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 21, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 22, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

5. — The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 33, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 34, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 35, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 36, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 37, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 38, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

6. — The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 49, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 50, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 51, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 52, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 53, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 54, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

7. ~~The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 65, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 66, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 67, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 68, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 69, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 70, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.~~

8. ~~The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 81, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 82, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 83, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 84, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 85, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 86, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.~~

9. ~~The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 97, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 98, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 99, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 100, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 101, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 102, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.~~

10. ~~The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 113, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 114, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 115, 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 i) the LC-CDR1 comprising the amino~~

acid sequence of SEQ ID NO: 116, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 117, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 118, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

11. — The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 129, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 130, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 131, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 132, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 133, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 134, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

12. — The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 145, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 146, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 147, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 148, 355, or 358, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 149 or 356, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 150, 357 or 359, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

13. — The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 161, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 162, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 163, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 164, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 165, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 166, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

~~14. —The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 177, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 178, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 179, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 180 or 353, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 181 or 354, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 182, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.~~

~~15. —The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 193, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 194, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 195, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 196, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 197, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 198, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.~~

~~16. —The anti-CD93 construct of claim 2, wherein the V_H comprises i) the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 209, ii) the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 210, and iii) the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 211, 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 i) the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 212, ii) the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 213, and iii) the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 214, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.~~

~~172.~~ The anti-CD93 construct of claim 12, wherein:

the V_H comprises ~~i)~~ the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 289, ~~ii)~~ the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 290, and ~~iii)~~

the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 291, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the HC-CDRs; ~~i)~~ and the V_L comprises ~~ii)~~ the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 292, ~~iii)~~ the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 293, and ~~iiii)~~ the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 294, or a variant thereof comprising up to 5, 4, 3, 2, or 1 amino acid substitutions in the LC-CDRs.

3. The anti-CD93 construct of claim 1, wherein:

the V_H comprises the HC-CDR1 comprising the amino acid sequence of SEQ ID NO: 289, the HC-CDR2 comprising the amino acid sequence of SEQ ID NO: 290, and the HC-CDR3 comprising the amino acid sequence of SEQ ID NO: 291; and the V_L comprises the LC-CDR1 comprising the amino acid sequence of SEQ ID NO: 292, the LC-CDR2 comprising the amino acid sequence of SEQ ID NO: 293, and the LC-CDR3 comprising the amino acid sequence of SEQ ID NO: 294.

~~184.~~ An anti-CD93 construct comprising an antibody moiety that specifically binds to CD93, comprising:

~~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 a V_H-chain region having the sequence set forth in SEQ ID NO: 13, 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 a V_L-chain region having the sequence set forth in SEQ ID NO: 14;~~

~~—— 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 a V_H-chain region having the sequence set forth in any of SEQ ID NO: 29 and 307-312, 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 a V_L-chain region having the sequence set forth in any of SEQ ID NO: 30, and 313-318;~~

~~—— 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 a V_H-chain region having the sequence set forth in SEQ ID NO: 45, 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 a V_L-chain region having the sequence set forth in SEQ ID NO: 46;~~

~~———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 a V_H-chain region having the sequence set forth in SEQ ID NO: 61, 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 a V_L-chain region having the sequence set forth in SEQ ID NO: 62;~~

~~———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 a V_H-chain region having the sequence set forth in SEQ ID NO: 77, 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 a V_L-chain region having the sequence set forth in SEQ ID NO: 78;~~

~~———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 a V_H-chain region having the sequence set forth in SEQ ID NO: 93, 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 a V_L-chain region having the sequence set forth in SEQ ID NO: 94;~~

~~———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 a V_H-chain region having the sequence set forth in SEQ ID NO: 109, 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 a V_L-chain region having the sequence set forth in SEQ ID NO: 110;~~

~~———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 a V_H-chain region having the sequence set forth in SEQ ID NO: 125, 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 a V_L-chain region having the sequence set forth in SEQ ID NO: 126;~~

~~———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 a V_H-chain region having the sequence set forth in SEQ ID NO: 141, 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 a V_L-chain region having the sequence set forth in SEQ ID NO: 142;~~

~~———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 a V_H-chain region having the sequence set forth in any of SEQ ID NO: 157 and 360-362, 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 a V_L chain region having the sequence set forth in any of SEQ ID NO: 158, and 363-365;~~

~~—— 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 a V_H chain region having the sequence set forth in SEQ ID NO: 173, 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 a V_L chain region having the sequence set forth in SEQ ID NO: 174;~~

~~—— l) 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 a V_H chain region having the sequence set forth in any of SEQ ID NO: 189 and 347-349, 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 a V_L chain region having the sequence set forth in any of SEQ ID NO: 190, and 350-352;~~

~~—— 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 a V_H chain region having the sequence set forth in SEQ ID NO: 205, 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 a V_L chain region having the sequence set forth in SEQ ID NO: 206;~~

~~—— n) 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 a V_H chain region having the sequence set forth in SEQ ID NO: 221, 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 a V_L chain region having the sequence set forth in SEQ ID NO: 222;~~

~~o) 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 a V_H chain region having the sequence set forth in any of SEQ ID NO: 287 and 319-321, 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 a V_L chain region having the sequence set forth in any of SEQ ID NO: 288, and 322-324;~~

~~p) 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 a V_H chain region having the sequence set forth in any one of SEQ ID NOs: 307-312, 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 a V_L-chain region having the sequence set forth in any one of SEQ ID NOs: 313-318; or~~

~~q) 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 a V_H-chain region having the sequence set forth in any one of SEQ ID NOs: 319-321, 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 a V_L-chain region having the sequence set forth in any one of SEQ ID NOs: 322-324.~~

~~195.~~ The anti-CD93 construct of any one of claims ~~1-181-4~~, wherein:

the V_H comprises an amino acid sequence of ~~any one of~~ SEQ ID NOs: ~~13, 29, 45, 61, 77, 93, 109, 125, 141, 157, 173, 189, 205, 221, 287, 307-312~~ and 319-321 or a variant comprising an amino acid sequence having at least about 80% sequence identity; and/or wherein the V_L comprises an amino acid sequence of ~~any one of~~ SEQ ID NOs: ~~14, 30, 46, 62, 78, 94, 110, 126, 142, 158, 174, 190, 206, 222, 288, 313-318~~ and 322-324, or a variant comprising an amino acid sequence having at least about 80% sequence identity.

~~206.~~ The anti-CD93 construct of any one of claims 1-5~~claim 19~~, wherein:

(a) the V_H comprises an amino acid sequence of SEQ ID NO: ~~13, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and 287, and wherein~~ the V_L comprises an amino acid sequence of SEQ ID NO: ~~14, or a variant comprising an amino acid sequence having at least about 80% sequence identity; 288;~~

(b) the V_H comprises an amino acid sequence of ~~any of~~ SEQ ID NO: ~~29 and 307-312, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and 287, and wherein~~ the V_L comprises an amino acid sequence of ~~any of~~ SEQ ID NO: ~~30, and 313-318, or a variant comprising an amino acid sequence having at least about 80% sequence identity; 322;~~

(c) the V_H comprises an amino acid sequence of SEQ ID NO: ~~45, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and 287, and wherein~~ the V_L comprises an amino acid sequence of SEQ ID NO: ~~46, or a variant comprising an amino acid sequence having at least about 80% sequence identity; 323;~~

(d) the V_H comprises an amino acid sequence of SEQ ID NO: ~~61, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and 287, and~~

wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~62, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~324;

(e) the V_H comprises an amino acid sequence of SEQ ID NO: ~~77, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~319, and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~78, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~288;

(f) the V_H comprises an amino acid sequence of SEQ ID NO: ~~93, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~319, and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~94, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~322;

(g) the V_H comprises an amino acid sequence of SEQ ID NO: ~~109, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~319, and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~110, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~323;

(h) the V_H comprises an amino acid sequence of SEQ ID NO: ~~125, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~319, and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~126, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~324;

(i) the V_H comprises an amino acid sequence of SEQ ID NO: ~~141, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~320, and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~142, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~288;

(j) the V_H comprises an amino acid sequence of SEQ ID NO: ~~157, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~320, and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~158, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~322;

(k) the V_H comprises an amino acid sequence of SEQ ID NO: ~~173, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~320, and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~174, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~323;

(l) the V_H comprises an amino acid sequence of ~~any of~~ SEQ ID NO: ~~189 and 347-349, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~320, and wherein the V_L comprises an amino acid sequence of ~~any of~~ SEQ ID NO: ~~190,~~

and 350-352, or a variant comprising an amino acid sequence having at least about 80% sequence identity,324;

(m) the V_H comprises an amino acid sequence of SEQ ID NO: ~~205, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~321 and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~206, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~288;

(n) the V_H comprises an amino acid sequence of SEQ ID NO: ~~221, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~321, and wherein the V_L comprises an amino acid sequence of SEQ ID NO: ~~222, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~322;

(o) the V_H comprises an amino acid sequence of ~~any of~~ SEQ ID NO: ~~287 and 319-321, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~321, and wherein the V_L comprises an amino acid sequence of ~~any of~~ SEQ ID NO: ~~288, and 322-324, or a variant comprising an amino acid sequence having at least about 80% sequence identity,~~323;

(p) the V_H comprises an amino acid sequence of ~~any one of~~ SEQ ID NOs: ~~307-312, or a variant comprising an amino acid sequence having at least about 80% sequence identity; and~~321, and wherein the V_L comprises an amino acid sequence of ~~any one of~~ SEQ ID NOs: ~~313-318, or a variant comprising an amino acid sequence having at least about 80% sequence identity, or~~324.

~~q) the V_H comprises an amino acid sequence of any one of SEQ ID NOs: 319-321, 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 any one of SEQ ID NOs: 322-324, or a variant comprising an amino acid sequence having at least about 80% sequence identity.~~

7. The anti-CD93 construct of any one of claims 1-6, wherein the construct comprises a second moiety that binds to VEGF.

8. The anti-CD93 construct of claim 7, wherein the anti-CD93 antibody moiety is an anti-CD93 full-length antibody comprising two heavy chains and two light chains, and wherein the second moiety is fused to C-terminus of both of the heavy chains of the anti-CD93 full-length antibody.

~~2319.~~ The anti-CD93 construct of any one of claims 1-~~208~~, 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')₂, an Fv fragment, a disulfide stabilized Fv fragment (dsFv), a (dsFv)₂, a Fv-Fc fusion, a scFv-Fc fusion, a scFv-Fv fusion, a diabody, a tribody, and a tetrabody.

~~2210.~~ The anti-CD93 construct of claim ~~219~~, wherein the antibody moiety is a full-length antibody.

~~2311.~~ The anti-CD93 construct of any one of claims 1-~~2210~~, wherein the antibody moiety has an Fc fragment is selected from the group consisting of Fc fragments from IgG, IgA, IgD, IgE, IgM, and combinations and hybrids thereof.

~~2412.~~ The anti-CD93 construct of claim ~~2311~~, wherein the Fc fragment is selected from the group consisting of Fc fragments from IgG1, IgG2, IgG3, IgG4, and combinations and hybrids thereof.

~~2513.~~ The anti-CD93 construct of claim ~~2311~~ or claim ~~2412~~, wherein the Fc fragment has:

a) a reduced effector function as compared to the corresponding wildtype Fc fragment; or

b) enhanced effector function as compared to the corresponding wildtype Fc fragment.

~~26.—The anti-CD93 construct of claim 23 or claim 24, wherein the Fc fragment has an enhanced effector function as compared to the corresponding wildtype Fc fragment.~~

~~2714.~~ The anti-CD93 construct of any one of claims ~~1-261-13~~, wherein the antibody moiety blocks the binding of CD93 to IGFBP7 and/or MMRN2.

~~28.—The anti-CD93 construct of any one of claims 1-27, wherein the antibody moiety blocks the binding of CD93 to MMRN2.~~

~~2915.~~ The anti-CD93 construct of any one of claims ~~1-221-10~~, wherein the CD93 is a human CD93.

- ~~3016.~~ A pharmaceutical composition comprising the anti-CD93 construct of any one of claims ~~1-151-29~~, and a pharmaceutical acceptable carrier.
- ~~3417.~~ An isolated nucleic acid encoding the anti-CD93 construct of any one of claims ~~1-151-29~~ or a portion thereof.
- ~~3218.~~ A vector comprising the isolated nucleic acid of claim ~~3417~~.
- ~~3319.~~ An isolated host cell comprising the isolated nucleic acid of claim ~~1734~~, or the vector of claim ~~3018~~.
- ~~3420.~~ An immunoconjugate comprising the anti-CD93 construct of any one of claims ~~1-151-29~~, linked to a therapeutic agent or a label.
- ~~21.~~ An effective amount of the anti-CD93 construct of any one of claims 1-15, or the pharmaceutical composition of claim 16 for use in treating a disease or condition in an individual.
- ~~35.—A method of producing an anti-CD93 construct comprising:~~
- ~~a) culturing the isolated host cell of claim 33 under conditions effective to express the anti-CD93 construct; and~~
- ~~b) obtaining the expressed anti-CD93 construct from the host cell.~~
- ~~3622.~~ Use of the anti-CD93 construct of any one of claims 1-15, or the pharmaceutical composition of claim 16 in the manufacture of a medicament for~~A method of treating a disease or condition in an individual, comprising administering to the individual an effective mount of the anti-CD93 construct of any one of claims 1-29, or the pharmaceutical composition of claim 30.~~
- ~~3723.~~ The anti-CD93 construct or the pharmaceutical composition for use of claim 21 or the method~~use~~ of claim ~~3622~~, wherein the disease or condition is associated with an abnormal vascular structure; and/or the disease or condition is a cancer; and/or wherein the anti-CD93 construct is to be used parenterally and/or with a second therapy in treating the disease or condition.
- ~~38.—The method of claim 36 or claim 37, wherein the disease or condition is a cancer.~~

24. The anti-CD93 construct or the pharmaceutical composition for use or the use of claim 23, wherein the cancer is a solid tumor; and/or wherein the cancer comprises CD93+ endothelial cells; and/or wherein the cancer comprises IGFBP7+ blood vessels and/or MMRN2+ blood vessels; and/or wherein the cancer is characterized by tumor hypoxia; and/or wherein the cancer is a locally advanced or metastatic cancer.

~~39. The method of claim 38, wherein the cancer is a solid tumor.~~

~~40. The method of claim 38 or claim 39, wherein the cancer comprises CD93+ endothelial cells.~~

~~41. The method of any one of claims 38-40, wherein the cancer comprises IGFBP7+ blood vessels.~~

~~42. The method of any one of claims 38-41, wherein the cancer comprises MMRN2+ blood vessels.~~

~~43. The method of any one of claims 38-42, wherein the cancer is characterized by tumor hypoxia.~~

~~44. The method of any one of claims 38-43, wherein the cancer is a locally advanced or metastatic cancer.~~

4525. The anti-CD93 construct or the pharmaceutical composition for use or the use of claim 23 or claim 24~~method of any one of claims 38-44~~, wherein the cancer is selected from the group consisting of a lymphoma, colon cancer, brain cancer, breast cancer, ovarian cancer, endometrial cancer, esophageal cancer, prostate cancer, cervical cancer, renal cancer, bladder cancer, gastric cancer, non-small cell lung cancer, melanoma, and pancreatic cancer.

~~46. The method of any one of claims 36-45, wherein the anti-CD93 construct is administered parenterally into the individual.~~

~~47. The method of any one of claims 36-46, wherein the method further comprises administering a second therapy.~~

~~48. The method of claim 47, wherein the second therapy is selected from the group consisting of surgery, radiation, gene therapy, immunotherapy, bone marrow transplantation,~~

~~stem cell transplantation, hormone therapy, targeted therapy, cryotherapy, ultrasound therapy, photodynamic therapy, and chemotherapy.~~

~~49. — The method of claim 48, wherein the second therapy is an immunotherapy.~~

~~50. — The method of claim 49, wherein the immunotherapy comprises administering an immunomodulatory agent.~~

~~51. — The method of claim 50, wherein the immunomodulatory agent is an immune checkpoint inhibitor.~~

~~52. — The method of claim 51, wherein the immune checkpoint inhibitor comprises an anti-PD-L1 antibody or an anti-PD-1 antibody.~~

~~53. — The method of any one of claims 36-52, wherein the individual is a human.~~