WHAT IS CLAIMED IS:

1. A Tn3 scaffold comprising a CD40L-specific monomer subunit, wherein the monomer subunit comprises seven beta strands designated A, B, C, D, E, F, and G, and six loop regions designated AB, BC, CD, DE, EF, and FG, and wherein the Tn3 scaffold specifically binds to a CD40L epitope comprising amino acids located at positions 142 to 155, 200 to 230, or 247 to 251 of SEQ ID NO: 1.

2. The Tn3 scaffold of claim 1, comprising a single CD40L-specific monomer subunit.

3. The Tn3 scaffold of claim 1, comprising two CD40L-specific monomer subunits connected in tandem.

4. The Tn3 scaffold of claim 3, wherein the two CD40L-specific monomer subunits are directly connected.

5. The Tn3 scaffold of claim 3, wherein the two CD40L-specific monomer subunits are connected by a linker.

6. The Tn3 scaffold of claim 5, wherein the linker comprises a peptide linker.

7. The Tn3 scaffold of claim 6, wherein the peptide linker is a flexible peptide linker.

8. The Tn3 scaffold of claim 7, wherein the peptide linker comprises a $(G_mX)_n$ sequence wherein:

   (a) X is Serine (S), Alanine (A), Glycine (G), Leu (L), Isoleucine (I), or Valine (V);

   (b) m and n are integers;

   (c) m is 1, 2, 3 or 4; and

   (d) n is 1, 2, 3, 4, 5, 6, or 7.

9. The Tn3 scaffold of claim 8, wherein the peptide linker comprises SEQ ID NO: 131, SEQ ID NO: 132, SEQ ID NO: 142 or SEQ ID NO: 143.

10. The Tn3 scaffold of claim 3, wherein the binding of the scaffold to CD40L is improved over that of a Tn3 scaffold comprising a single CD40L-specific monomer subunit.

11. The Tn3 scaffold of claim 3, wherein the binding of the scaffold to CD40L improves the action on the target over that of a Tn3 scaffold comprising a single CD40L-specific monomer subunit.

12. The Tn3 scaffold of claim 10, wherein the improvement in binding to CD40L is an improvement in binding affinity, an improvement in binding avidity, or both.

13. The Tn3 scaffold of claim 10 wherein binding affinity for CD40L and protein stability are improved over those of a Tn3 scaffold comprising a single CD40L-specific monomer subunit.

14. The Tn3 scaffold of claim 10, wherein binding avidity for CD40L and protein stability are improved over those of a Tn3 scaffold comprising a single CD40L-specific monomer subunit.

15. The Tn3 scaffold of any one of claims 1-9, wherein at least one CD40L-specific monomer subunit is bound to a linker, or to a heterologous moiety.

16. The Tn3 scaffold of claim 15, wherein a linker or a heterologous moiety is conjugated to the N-terminus or the C-terminus of the scaffold.

17. The Tn3 scaffold of claim 15, wherein the linker comprises a functional moiety.

18. The Tn3 scaffold of claim 17, wherein the functional moiety is an immunoglobulin or a fragment thereof.

19. The Tn3 scaffold of claim 18, wherein the immunoglobulin or fragment thereof comprises an Fc domain.

20. The Tn3 scaffold of claim 19, wherein the Fc domain fails to induce at least one FcγR-mediated effector function.

21. The Tn3 scaffold of claim 20, wherein said at least one FcγR-mediated effector function is ADCC.

22. The Tn3 scaffold of claim 15, wherein at least one CD40L-specific monomer subunit is bound to a heterologous moiety.

23. The Tn3 scaffold of any one of claims 3-14, comprising at least two identical CD40L-specific monomer subunits.

24. The Tn3 scaffold of any one of claims 3-14, wherein at least two CD40L-specific monomer subunits specifically bind to different CD40L epitopes.

25. The Tn3 scaffold of claim 1, wherein the beta strands of at least one CD40L-specific monomer subunit have at least 90% sequence identity to the beta strands of SEQ ID NO: 3.

26. The Tn3 scaffold of claim 1, wherein the A beta strand comprises SEQ ID NO: 11 except for at least one mutation.

27. The Tn3 scaffold of claim 1, wherein the B beta strand comprises SEQ ID NO: 12 except for at least one mutation.

28. The Tn3 scaffold of claim 1, wherein the C beta strand comprises SEQ ID NO: 13 or 14 except for at least one mutation, and wherein the cysteine in SEQ ID NO: 13 or 14 is not substituted.

29. The Tn3 scaffold of claim 1, wherein the D beta strand comprises SEQ ID NO: 15 except for at least one mutation.

30. The Tn3 scaffold of claim 1, wherein the E beta strand comprises SEQ ID NO: 16 except for at least one mutation.

31. The Tn3 scaffold of claim 1, wherein the F beta strand comprises SEQ ID NO: 17 except for at least one mutation, and wherein the cysteine in SEQ ID NO: 17 is not substituted.

32. The Tn3 scaffold of claim 1, wherein the G beta strand comprises SEQ ID NO: 18 except for at least one mutation.

WHAT IS CLAIMED IS:

1. A Tn3 scaffold comprising at least two CD40L-specific monomer subunits, wherein each monomer subunit comprises seven beta strands designated A, B, C, D, E, F, and G, and six loop regions designated AB, BC, CD, DE, EF, and FG,
wherein the AB loop is SEQ ID NO: 4, the BC loop is SEQ ID NO: 86, the CD loop is SEQ ID NO: 6, the DE loop is SEQ ID NO: 96, the EF loop is SEQ ID NO: 8, and the FG loop is SEQ ID NO: 139,
and wherein the Tn3 scaffold specifically binds to CD40L.

2. The Tn3 scaffold of claim 1, wherein the CD40L-specific monomer subunits are connected in tandem.

3. The Tn3 scaffold of claim 2, wherein the CD40L-specific monomer subunits are directly connected.

4. The Tn3 scaffold of claim 2, wherein the CD40L-specific monomer subunits are connected by a linker.

5. The Tn3 scaffold of claim 4, wherein the linker comprises a peptide linker.

6. The Tn3 scaffold of claim 5, wherein the peptide linker is a flexible peptide linker.

7. The Tn3 scaffold of claim 6, wherein the peptide linker comprises a $(G_mX)_n$ sequence wherein:

   (a) X is Serine (S), Alanine (A), Glycine (G), Leu (L), Isoleucine (I), or Valine (V);

   (b) m and n are integers;

   (c) m is 1, 2, 3 or 4; and

   (d) n is 1, 2, 3, 4, 5, 6, or 7.

8. The Tn3 scaffold of claim 7, wherein the peptide linker comprises SEQ ID NO: 131, SEQ ID NO: 132, SEQ ID NO: 142 or SEQ ID NO: 143.

9. The Tn3 scaffold of claim 1, wherein the binding of the scaffold to CD40L is improved over that of a Tn3 scaffold comprising a single CD40L-specific monomer subunit.

10. The Tn3 scaffold of claim 1, wherein the binding of the scaffold to CD40L improves the action on the target over that of a Tn3 scaffold comprising a single CD40L-specific monomer subunit.

11. The Tn3 scaffold of claim 9, wherein the improvement in binding to CD40L is an improvement in binding affinity, an improvement in binding avidity, or both.

12. The Tn3 scaffold of claim 9, wherein binding affinity for CD40L and protein stability are improved over those of a Tn3 scaffold comprising a single CD40L-specific monomer subunit.

13. The Tn3 scaffold of claim 9, wherein binding avidity for CD40L and protein stability are improved over those of a Tn3 scaffold comprising a single CD40L-specific monomer subunit.

14. The Tn3 scaffold of any one of claims 1-8, wherein at least one CD40L-specific monomer subunit is bound to a linker, or to a heterologous moiety.

15. The Tn3 scaffold of claim 14, wherein a linker or a heterologous moiety is conjugated to the N-terminus or the C-terminus of the scaffold.

16. The Tn3 scaffold of claim 14, wherein at least one CD40L-specific monomer subunit is bound to a heterologous moiety.

17. The Tn3 scaffold of claim 16, wherein the heterologous moiety is selected from the group consisting of: a protein, a peptide, a protein domain, a linker, a drug, a toxin, a cytotoxic agent, an imaging agent, a radionuclide, a radioactive compound, an organic polymer, an inorganic polymer, a polyethylene glycol (PEG), biotin, an albumin, a human serum albumin (HSA), a HSA FcRn binding portion, an antibody, a domain of an antibody, an antibody fragment, a single chain antibody, a domain antibody, an albumin binding domain, an enzyme, a ligand, a receptor, a binding peptide, a non-FnIII scaffold, an epitope tag, a recombinant polypeptide polymer, and a cytokine.

18. The Tn3 scaffold of claim 17, wherein the heterologous moiety is human serum albumin (HSA).

19. The Tn3 scaffold of claim 18, wherein said HSA is a variant HSA.

20. The Tn3 scaffold of claim 19, wherein the HSA variant has the amino acid sequence of SEQ ID NO: 133, or wherein the HSA variant comprises the sequence of full-length mature HSA having SEQ ID NO: 133 or 138 or a fragment thereof, except for at least one amino acid substitution, numbered relative to the position in full length mature HSA, at a position selected from the group consisting of 407, 415, 463, 500, 506, 508, 509, 511, 512, 515, 516, 521, 523, 524, 526, 535, 550, 557, 573, 574, and 580; wherein the at least one amino acid substitution does not comprise a lysine (K) to glutamic acid (E) at position 573, and wherein said Tn3 scaffold has a plasma half-life longer than the plasma half-life of a Tn3 scaffold not conjugated to said HSA variant.

21. The Tn3 scaffold of claim 1, wherein the beta strands of at least one CD40L-specific monomer subunit have at least 90% sequence identity to the beta strands of SEQ ID NO: 3.

22. The Tn3 scaffold of claim 1, wherein the A beta strand comprises SEQ ID NO: 11.

23. The Tn3 scaffold of claim 1, wherein the B beta strand comprises SEQ ID NO: 12.

24. The Tn3 scaffold of claim 1, wherein the C beta strand comprises SEQ ID NO: 13 or 14.

25. The Tn3 scaffold of claim 1, wherein the D beta strand comprises SEQ ID NO: 15.

26. The Tn3 scaffold of claim 1, wherein the E beta strand comprises SEQ ID NO: 16.

27. The Tn3 scaffold of claim 1, wherein the F beta strand comprises SEQ ID NO: 17.

28. The Tn3 scaffold of claim 1, wherein the G beta strand comprises SEQ ID NO: 18.

29. The Tn3 scaffold of any one of claims 1-28 comprising a sequence selected from the group consisting of: SEQ ID NOs: 134, 135, 144, 145, 146, and 208.

30. The Tn3 scaffold of any one of claims 1-28, wherein said CD40L is human CD40L.

31. The Tn3 scaffold of claim 30, wherein said CD40L is membrane bound CD40L having SEQ ID NO: 1 or soluble CD40L having SEQ ID NO: 2.