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What is claimed is:

1. A method for treating a patient suffering from an IFN- γ -mediated disease comprising administering to the patient a monoclonal anti-human interferon gamma (anti-huIFN- γ) antibody at a dose of from about 15 milligrams to about 200 milligrams,
wherein the anti-huIFN- γ antibody has a heavy chain complementarity determining region 1 (CDR1) comprising the amino acid sequence of SEQ ID NO:34, a heavy chain complementarity determining region 2 (CDR2) comprising the amino acid sequence of SEQ ID NO:35, a heavy chain complementarity determining region 3 (CDR3) comprising the amino acid sequence of SEQ ID NO:36 or SEQ ID NO:37, a light chain CDR1 comprising the amino acid sequence of SEQ ID NO:38, SEQ ID NO:39, or SEQ ID NO:40, a light chain CDR2 comprising the amino acid sequence of SEQ ID NO:41 or SEQ ID NO:42, and a light chain CDR3 comprising the amino acid sequence of SEQ ID NO:43 or SEQ ID NO:44.
2. The method of claim 1, wherein the heavy chain CDR3 comprises the amino acid sequence of SEQ ID NO:36, the light chain CDR1 comprises the amino acid sequence of SEQ ID NO:38, the light chain CDR2 comprises the amino acid sequence of SEQ ID NO:41, and the light chain CDR3 comprises the amino acid sequence of SEQ ID NO:43.
3. The method of claim 1, wherein the heavy chain variable region of the antibody comprises the amino acid sequence of SEQ ID NO:6, SEQ ID NO:10, SEQ ID NO:14, or SEQ ID NO:30.
4. The method of claim 1 or 3, wherein the light chain variable region of the antibody comprises the amino acid sequence of SEQ ID NO:8, SEQ ID NO:12, SEQ ID NO:16, or SEQ ID NO:31.
5. The method of claim 4, wherein the heavy chain variable region and the light chain variable region comprise, respectively, SEQ ID NO:6 and SEQ ID NO:8, SEQ ID NO:10 and SEQ ID NO:12, SEQ ID NO:14 and SEQ ID NO:16, SEQ ID NO:30 and SEQ ID NO:12, or SEQ ID NO:14 and SEQ ID NO:31.
6. The method of any one of claims 1 to 5, wherein the dose is from about 40 milligrams to about 200 milligrams.
7. The method of claim 6, wherein the dose is from about 60 milligrams to about 150 milligrams.
8. The method of claim 6, wherein the dose is from about 100 milligrams to about 180 milligrams.
9. The method of any one of claims 1 to 8, wherein a glucocorticoid is concurrently administered to the patient.
10. The method of claim 9, wherein the glucocorticoid is prednisone.
11. The method of any one of claims 1 to 10, wherein mycophenolate mofetil, azathioprine, leflunomide, methotrexate, or an anti-malarial is concurrently administered to the patient.
12. The method of claim 11, wherein mycophenolate mofetil is concurrently administered to the patient.

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13. The method of any one of claims 1 to 12, wherein expression at the RNA or protein level of one or more gene(s) listed in Table 1, 2, 4, 5, and/or 6 in a biological sample from the patient taken before the antibody is administered deviates from expression of that gene(s) in a control biological sample in a direction consistent with excess IFN- γ .

14. The method of claim 13, wherein the one or more gene(s) are listed in Table 4 and/or 5.

15. The method of claim 13, wherein the expression of at least five genes listed in Table 1, 2, 4, and/or 5 in the biological sample from the patient deviates from the expression of those genes in the control biological sample in a direction consistent with excess IFN- γ .

16. The method of claim 13 or 15, wherein the biological sample from the patient exhibits elevated expression at the RNA or protein level as compared to expression in the control biological sample of one or more of the following genes: indoleamine 2,3-dioxygenase 1 (IDO1), ankyrin repeat domain 22 (ANKRD22), chemokine (C-X-C motif) ligand 9 (CXCL9), family with sequence similarity 26, member F (FAM26F), purinergic receptor P2Y, G-protein coupled, 14 (P2RY14), guanylate binding protein 5 (GBP5), serpin peptidase inhibitor, clade G, member 1 (SERPING1), Fc fragment of IgG, high affinity lb, receptor (CD64), guanylate binding protein 1, interferon-inducible, 67 kDa (GBP1), chemokine (C-X-C motif) ligand 10 (CXCL10), ets variant 7 (ETV7), programmed death ligand-1 (PD-L1), basic leucine zipper transcription factor, ATF-like 2 (BATF2), Fc fragment of IgG, high affinity lb, receptor (FCGR1B or CD64), activating transcription factor 3 (ATF3), pyruvate dehydrogenase kinase, isozyme 4 (nuclear gene encoding mitochondrial protein; PDK4), and/or CD274.

17. The method of claim 16, wherein the biological sample from the patient exhibits elevated expression at the RNA or protein level of GBP1 as compared to expression in the control biological sample.

18. The method of any one of claims 1 to 17, wherein the IFN- γ -mediated disease is selected from the group consisting of systemic lupus erythematosus (SLE), discoid lupus, lupus nephritis, inflammatory bowel disease, Crohn's disease, ulcerative colitis, and psoriasis.

19. The method of claim 18, wherein the IFN- γ -mediated disease is SLE.

20. The method of claim 19, wherein the IFN- γ -mediated disease is lupus nephritis.

21. The method of any one of claims 1 to 20, wherein the antibody is administered subcutaneously or intravenously.

22. The method of any one of claims 1 to 21, wherein the antibody is a human IgG antibody.

23. The method of claim 22, wherein the antibody is a human IgG1 antibody.

24. A method for treating a patient having an IFN- γ -mediated disease comprising administering to the patient a therapeutically effective dose an anti-huIFN- γ antibody,

wherein the anti-huIFN- γ antibody has a heavy chain CDR1 comprising the amino acid sequence of SEQ ID NO:34, a heavy chain CDR2 comprising the amino acid sequence of SEQ ID NO:35, a heavy chain CDR3 comprising the amino acid sequence of SEQ ID NO:36 or SEQ ID NO:37, a light chain CDR1 comprising the amino

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acid sequence of SEQ ID NO:38, SEQ ID NO:39, or SEQ ID NO:40, a light chain CDR2 comprising the amino acid sequence of SEQ ID NO:41 or SEQ ID NO:42, and a light chain CDR3 comprising the amino acid sequence of SEQ ID NO:43 or SEQ ID NO:44, and

wherein the level(s) of expression in a biological sample taken from the patient before administration of the antibody of one or more genes listed in Table 1, 2, 4, 5, and/or 6 at the RNA or protein level deviate from the level(s) of expression of the gene(s) in a control biological sample in a direction consistent with excess IFN- γ .

25. The method of claim 24, wherein the levels expression in the biological sample of at least 5 genes from Table 2, 4, and/or 5 deviate from the levels of expression of the genes in the control biological sample in a direction consistent with excess IFN- γ .

26. The method of claim 24 or 25, wherein the antibody comprises the amino acid sequences of SEQ ID NO:6, SEQ ID NO:10, SEQ ID NO:14, or SEQ ID NO:30 and SEQ ID NO:8, SEQ ID NO:12, SEQ ID NO:16, or SEQ ID NO:31.

27. The method of any one of claims 24 to 26, wherein the dose administered is from 60 mg to 300 mg.

28. The method of claim 27, wherein the dose administered is from 80 mg to 250 mg.

29. The method of claim 28, wherein the dose administered is from 100 mg to 180 mg.

30. The method of any one of claims 24 to 29, wherein the patient has SLE, an inflammatory bowel disease, or psoriasis.

31. The method claim 30, wherein the patient has SLE.

32. The method of claim 31, wherein the patient has lupus nephritis.

33. The method of any one of claims 24 to 32, wherein a glucocorticoid is concurrently administered.

34. The method of any one of claims 24 to 33, wherein mycophenolate mofetil, azathioprine, leflunomide, methotrexate, or an anti-malarial is concurrently administered to the patient.

35. A method for treating an IFN- γ mediated disease comprising administering to a patient in need thereof a dose of a human IgG anti-huIFN- γ antibody such that the concentration of total IFN- γ protein in the patient's serum is maintained at a plateau concentration for at least about two weeks following administration, wherein the antibody comprises the amino acid sequences of SEQ ID NO:6 and SEQ ID NO:8.

36. The method of claim 35, wherein the plateau concentration of total IFN- γ protein in serum is maintained for at least about three weeks after administration.

37. The method of claim 36, wherein the plateau concentration of total IFN- γ protein in serum is maintained for at least about four weeks after administration.

38. The method of claim 37, wherein the plateau concentration of total IFN- γ protein in serum is maintained for at least about six weeks after administration.

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39. The method of any one of claims 35 to 38, wherein the plateau concentration of total IFN- γ protein in serum is from about 100 pg/mL to about 2000 pg/mL.
40. The method of claim 39, wherein the plateau concentration of total IFN- γ protein in serum is at least about 200 pg/mL.
41. The method of claim 40, wherein the plateau concentration of total IFN- γ protein in serum is at least about 300 pg/mL.
42. The method of any one of claims 35 to 41, wherein the antibody is a human IgG1 antibody.
43. The method of any one of claims 35 to 42, wherein the IFN- γ -mediated disease is psoriasis, SLE, lupus nephritis, discoid lupus, or an inflammatory bowel disease.
44. A method of treating a patient suffering from a disease selected from the group consisting of SLE, discoid lupus, lupus nephritis, inflammatory bowel disease, and psoriasis, the method comprising
selecting a patient, wherein expression at the RNA or protein level of one or more gene(s) listed in Table(s) 2, 4, 5, and/or 6 in a biological sample taken from the patient before treating the patient deviates from expression of that gene(s) in a control biological sample in a direction consistent with excess IFN- γ pathway activation, and
administering to the patient a monoclonal human anti-human interferon gamma (anti-huIFN- γ) antibody at a dose of from about 20 milligrams to about 300 milligrams,
wherein the antibody is an IgG1 antibody and comprises the amino acid sequences of SEQ ID NO:6 and SEQ ID NO:8.
45. The method of claim 44, wherein the expression of at least five genes listed in Table(s) 2, 4, and/or 5 in the biological sample from the patient deviates from the expression of those genes in the control biological sample in a direction consistent with excess IFN- γ pathway activation.
46. The method of claim 44 or 45, wherein the one or more gene(s) are listed in Table(s) 4 and/or 5.
47. The method of any one of claims 44 to 46, wherein the biological sample from the patient exhibits elevated expression at the RNA or protein level as compared to expression in the control biological sample of one or more of the following genes: indoleamine 2,3-dioxygenase 1 (IDO1), ankyrin repeat domain 22 (ANKRD22), chemokine (C-X-C motif) ligand 9 (CXCL9), family with sequence similarity 26, member F (FAM26F), purinergic receptor P2Y, G-protein coupled, 14 (P2RY14), guanylate binding protein 5 (GBP5), serpin peptidase inhibitor, clade G, member 1 (SERPING1), Fc fragment of IgG, high affinity IgG₁ receptor (CD64), guanylate binding protein 1, interferon-inducible, 67 kDa (GBP1), chemokine (C-X-C motif) ligand 10 (CXCL10), ets variant 7 (ETV7), programmed death ligand-1 (PD-L1), basic leucine zipper transcription factor, ATF-like 2 (BATF2), Fc fragment of IgG, high affinity IgG₁ receptor (FCGR1B or CD64), activating transcription factor 3 (ATF3), pyruvate dehydrogenase kinase, isozyme 4 (nuclear gene encoding mitochondrial protein; PDK4), and/or CD274.
48. The method of claim 47, wherein the biological sample from the patient exhibits elevated expression at the RNA or protein level of GBP1 as compared to expression in the control biological sample.

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49. The method of any one of claims 44 to 48, wherein the dose is from about 80 milligrams to about 300 milligrams.
50. The method of any one of claims 44 to 48, wherein the dose is from about 20 milligrams to about 80 milligrams.
51. The method of any one of claims 44 to 50, wherein the antibody comprises the amino acid sequences of SEQ ID NO:6 and SEQ ID NO:8.
52. The method of any one of claims 44 to 51, wherein the antibody is administered subcutaneously or intravenously.
53. The method of any one of claims 44 to 52, wherein the disease is SLE or lupus nephritis.
54. The method of claim 53, wherein a glucocorticoid is concurrently administered to the patient.
55. The method of claim 53 or 54, wherein mycophenolate mofetil, azathioprine, leflunomide, methotrexate, or an anti-malarial is concurrently administered to the patient.
56. A method for treating a patient suffering from SLE, lupus nephritis, an inflammatory bowel disease, or psoriasis comprising:
- (a) taking a biological sample from the patient before administering a human anti-huIFN- γ antibody in step (b), wherein the level(s) of expression at the RNA or protein level in the biological sample from the patient of one or more of the genes in Table(s) 2, 3, 5, and/or 6 is determined;
 - (b) administering to the patient a pharmacodynamically effective dose of the human anti-huIFN- γ antibody, wherein the antibody has a heavy chain complementarity determining region 1 (CDR1) comprising the amino acid sequence of SEQ ID NO:34, a heavy chain complementarity determining region 2 (CDR2) comprising the amino acid sequence of SEQ ID NO:35, a heavy chain complementarity determining region 3 (CDR3) comprising the amino acid sequence of SEQ ID NO:36 or SEQ ID NO:37, a light chain CDR1 comprising the amino acid sequence of SEQ ID NO:38, SEQ ID NO:39, or SEQ ID NO:40, a light chain CDR2 comprising the amino acid sequence of SEQ ID NO:41 or SEQ ID NO:42, and a light chain CDR3 comprising the amino acid sequence of SEQ ID NO:43 or SEQ ID NO:44;
 - (c) taking a second biological sample taken from the patient after administration of the antibody, wherein the level(s) of expression of the gene(s) of step (a) in the second biological sample are determined; and
 - (d) if the level(s) of expression of the gene(s) in the second biological sample determined in step (c), as compared to the level(s) of expression in the biological sample determined in step (a)
 - (i) is modulated in a direction consistent with inhibition of IFN- γ , then continuing treatment of the patient with another pharmacodynamically effective dose of the antibody or
 - (ii) is substantially the same as that in the biological sample of (a) or if the level of expression of the gene(s) in second biological sample of (c) deviates from the level of expression in the biological sample

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of (a) in a direction that is consistent with an excess of IFN- γ , then discontinuing treatment with the anti-human IFN- γ antibody.

57. The method of claim 56, wherein the pharmacodynamically effective dose is from about 20 mg to about 80 mg.

58. The method of claim 56, wherein the pharmacodynamically effective dose is from about 80 mg to about 250 mg.

59. The method of any one of claims 56 to 58, wherein the heavy chain CDR3 comprises the amino acid sequence of SEQ ID NO:36, the light chain CDR1 comprises the amino acid sequence of SEQ ID NO:38, the light chain CDR2 comprises the amino acid sequence of SEQ ID NO:41, and the light chain CDR3 comprises the amino acid sequence of SEQ ID NO:43.

60. The method of any one of claims 56 to 58, wherein the heavy chain variable region of the antibody comprises the amino acid sequence of SEQ ID NO:6, SEQ ID NO:10, SEQ ID NO:14, or SEQ ID NO:30.

61. The method of claim 60, wherein the light chain variable region of the antibody comprises the amino acid sequence of SEQ ID NO:8, SEQ ID NO:12, SEQ ID NO:16, or SEQ ID NO:31.

62. The method of claim 61, wherein the heavy chain variable region comprises the amino acid sequence of SEQ ID NO:6, and the light chain variable region comprises the amino acid sequence of SEQ ID NO:8.

63. The method of any one of claims 56 to 62, wherein the patient has SLE.

64. The method of claim 63, wherein the patient has lupus nephritis.

65. The method of claim 63, wherein the patient has discoid lupus.

66. The method of any one of claims 63 to 65, wherein a glucocorticoid and/or mycophenolate mofetil, azathioprine, leflunomide, methotrexate, or an anti-malarial is concurrently administered to the patient.

67. The method of any one of claims 56 to 62, wherein the patient has psoriasis.

68. The method of any one of claims 56 to 62, wherein the patient has an inflammatory bowel disease.

69. The method of claim 68, wherein the inflammatory bowel disease is Crohn's disease.

70. The method of claim 68, wherein the inflammatory bowel disease is ulcerative colitis.

71. The method of any one of claims 56 to 70, wherein the level(s) of expression of one or more of the following genes at the protein or RNA level is determined in steps (a) and (c): indoleamine 2,3-dioxygenase 1 (IDO1), ankyrin repeat domain 22 (ANKRD22), chemokine (C-X-C motif) ligand 9 (CXCL9), family with sequence similarity 26, member F (FAM26F), purinergic receptor P2Y, G-protein coupled, 14 (P2RY14), guanylate binding protein 5 (GBP5), serpin peptidase inhibitor, clade G, member 1 (SERPING1), Fc fragment of IgG, high affinity Ib, receptor (CD64), guanylate binding protein 1, interferon-inducible, 67 kDa (GBP1), chemokine (C-X-C motif) ligand 10 (CXCL10), ets variant 7 (ETV7), programmed death ligand-1 (PD-L1), basic leucine zipper transcription factor, ATF-like 2 (BATF2), Fc fragment of IgG, high affinity Ib, receptor (FCGR1B or CD64), activating

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transcription factor 3 (ATF3), pyruvate dehydrogenase kinase, isozyme 4 (nuclear gene encoding mitochondrial protein; PDK4), and/or CD274.

72. The method of claim 71, wherein the level of expression of CXCL10 is determined in steps (a) and (c).

73. A method for treating a patient suffering from SLE comprising administering to the patient a dose of at least about 60 milligrams, and not more than about 180 milligrams, of an anti-human IFN- γ antibody, wherein the anti-human IFN- γ antibody comprises SEQ ID NOs: 6 and 8.

74. The method of any one of claims 73, wherein the dose is administered subcutaneously or intravenously.

75. The method of claim 73 or 74, wherein the level of total IFN- γ protein in the patient's serum remains above about 200 pg/mL for at least about 2 weeks subsequent to a single dose.

76. The method of any one of claims 73 to 75, wherein a glucocorticoid is concurrently administered to the patient.

77. The method of any one of claims 73 to 76, wherein mycophenolate mofetil, azathioprine, leflunomide, methotrexate, or an anti-malarial is concurrently administered to the patient.

What is claimed is:

1. Use of a pharmaceutical composition comprising from about 15 milligrams to about 200 milligrams of a monoclonal anti-human interferon gamma (anti-huIFN- γ) antibody in the manufacture of a medicament for treating a patient suffering from an IFN- γ -mediated disease,

wherein the IFN- γ -mediated disease is selected from the group consisting of systemic lupus erythematosus (SLE), discoid lupus, lupus nephritis, inflammatory bowel disease, Crohn's disease and ulcerative colitis; and

wherein the anti-huIFN- γ antibody has a heavy chain complementarity determining region 1 (CDR1) comprising the amino acid sequence of SEQ ID NO:34, a heavy chain complementarity determining region 2 (CDR2) comprising the amino acid sequence of SEQ ID NO:35, a heavy chain complementarity determining region 3 (CDR3) comprising the amino acid sequence of SEQ ID NO:36 or SEQ ID NO:37, a light chain CDR1 comprising the amino acid sequence of SEQ ID NO:38, SEQ ID NO:39, or SEQ ID NO:40, a light chain CDR2 comprising the amino acid sequence of SEQ ID NO:41 or SEQ ID NO:42, and a light chain CDR3 comprising the amino acid sequence of SEQ ID NO:43 or SEQ ID NO:44.

2. The use of claim 1, wherein the heavy chain CDR3 comprises the amino acid sequence of SEQ ID NO:36, the light chain CDR1 comprises the amino acid sequence of SEQ ID NO:38, the light chain CDR2 comprises the amino acid sequence of SEQ ID NO:41, and the light chain CDR3 comprises the amino acid sequence of SEQ ID NO:43.

3. The use of claim 3, wherein the heavy chain variable region and the light chain variable region comprise, respectively, SEQ ID NO:6 and SEQ ID NO:8, SEQ ID NO:10 and SEQ ID NO:12, SEQ ID NO:14 and SEQ ID NO:16, SEQ ID NO:30 and SEQ ID NO:12, or SEQ ID NO:14 and SEQ ID NO:31.

4. Use of a pharmaceutical composition comprising at least about 60 milligrams and not more than about 180 milligrams of an anti-huIFN- γ antibody in the manufacture of a medicament for treating an SLE patient,

wherein the anti-huIFN- γ antibody comprises the amino acid sequences of SEQ ID NO:6 and SEQ ID NO:8.

5. The use of any one of claims 1 to 4, wherein expression at the RNA or protein level of one or more gene(s) listed in Table(s) 2, 4, 5, and/or 6 in a biological sample taken from the patient before use of the pharmaceutical composition deviates from expression of that gene(s) in a control biological sample in a direction consistent with excess IFN- γ pathway activation.

6. The use of any one of claims 1 to 5, wherein the pharmaceutical composition comprises from about 40 milligrams to about 200 milligrams, from about 60 milligrams to about 150 milligrams, or from about 100 milligrams to about 180 milligrams of the monoclonal anti-huIFN- γ antibody.

7. The use of any one of claims 1 to 6, wherein the patient concurrently uses a glucocorticoid, mycophenolate mofetil, azathioprine, leflunomide, methotrexate, or an anti-malarial.

8. The use of claim 5, wherein the biological sample from the patient exhibits elevated expression at the RNA or protein level as compared to expression in the control biological sample of one or more of the following genes: indoleamine 2,3-dioxygenase 1 (IDO1); ankyrin repeat domain 22 (ANKRD22); chemokine (C-X-C motif) ligand 9 (CXCL9); family with sequence similarity 26, member F (FAM26F); purinergic receptor P2Y, G-protein coupled, 14 (P2RY14); guanylate binding protein 5 (GBP5); serpin peptidase inhibitor, clade G, member 1 (SERPING1); guanylate binding protein 1, interferon-inducible, 67 kDa (GBP1); chemokine (C-X-C motif) ligand 10 (CXCL10); ets variant 7 (ETV7); programmed death ligand-1 (PD-L1); basic leucine zipper transcription factor, ATF-like 2 (BATF2); Fc fragment of IgG, high affinity Ib, receptor (FCGR1B or CD64); activating transcription factor 3 (ATF3); pyruvate dehydrogenase kinase, isozyme 4 (nuclear gene encoding mitochondrial protein; PDK4); and/or CD274.

9. The use of claim 8, wherein the biological sample from the patient exhibits elevated expression at the RNA or protein level of GBP1 as compared to expression in the control biological sample.

10. The use of any one of claims 1 to 9, wherein the anti-huIFN- γ antibody is a human IgG1 antibody.