1. A purified human IgG1 mAb that specifically binds to human IL−1α, the mAb comprising a heavy chain covalently joined to a light chain, wherein the heavy chain comprises the amino acid sequence of SEQ ID NO: 9 and the light chain comprises the amino acid sequence of SEQ ID NO:11.

2. A set of isolated nucleic acids comprising a first nucleic acid encoding the heavy chain of a human IgG1 mAb that specifically binds to IL−1α, and a second nucleic acid encoding the light chain of the human IgG1 mAb that specifically binds to human IL−1α, wherein the first nucleic acid encodes the amino acid sequence of SEQ ID NO: 9 and the second nucleic acid encodes the amino acid sequence of SEQ ID NO: 11.

3. The set of isolated nucleic acids of claim 2, wherein the first nucleic acid comprises the nucleotide sequence of SEQ ID NO: 10 and the second nucleic acid comprises the nucleotide sequence of SEQ ID NO: 12.

4. The set of isolated nucleic acids of claim 2, wherein the set of isolated nucleic acids is comprised within at least one expression vector.

5. The set of isolated nucleic acids of claim 3, wherein the set of isolated nucleic acids is comprised within at least one expression vector.

6. The set of isolated nucleic acids of claim 4, wherein the set of isolated nucleic acids is comprised within an isolated host cell.

7. The set of isolated nucleic acids of claim 6, wherein the host cell is a mammalian cell.

~~8. A method of killing a cell expressing human IL−1α, the method comprising the step of contacting the cell with a purified human IgG1 mAb that specifically binds to human IL−1α, wherein the cell is killed.~~

~~9~~ 8. ~~The method of claim 8~~ A method of killing a cell expressing human IL-1α, the method comprising the step of contacting the cell with a purified human IgG1 mAb that specifically binds to human IL-1α, wherein the cell is killed, wherein the human IgG1 mAb comprises a heavy chain comprising the amino acid sequence of SEQ ID NO. 9 and a light chain comprising the amino acid sequence of SEQ ID NO: 11.

~~10. A method of inhibiting migration of a cell through a basement membrane matrix, the method comprising the step of adding a purified mAb that specifically binds to human IL-1α to a mixture comprising the basement membrane matrix and the cell.~~

~~11. The method of claim 10, wherein the purified mAb is a human IgG1 mAb comprising a heavy chain covalently joined to a light chain.~~

~~12~~ 9. ~~The method of claim 11~~ A method of inhibiting migration of a cell through a basement membrane matrix, the method comprising the step of adding a purified mAb that specifically binds to human IL-1α to a mixture comprising the basement membrane matrix and the cell, wherein the purified mAb is a human IgG1 mAb comprising a heavy chain covalently joined to a light chain, wherein the heavy chain comprises the amino acid sequence of SEQ ID NO: 9 and a light chain comprises the amino acid sequence of SEQ ID NO:11.

~~13. A method of tracking inflammation in a human subject previously subjected to the steps of: obtaining from the subject a first sample of peripheral blood mononuclear cells at a first time; contacting the first sample with a purified mAb that specifically binds to human IL-1α; and determining the percent of cells in the first sample that bind the monoclonal Ab, the method comprising the steps of:~~

~~(a) obtaining from the subject a second sample of peripheral blood mononuclear cells at a second time;~~

~~(b) contacting the second sample with the purified mAb that specifically binds to human IL-1α;~~

~~(c) determining the percent of cells in the second sample that bind the monoclonal Ab; and~~

~~(d) comparing the percent of cells in the first sample that bind the mAb to the percent of cells in the second sample that bind the monoclonal Ab.~~

~~14. The method of claim 13, wherein the purified mAb is a human IgG1 mAb comprising a heavy chain covalently joined to a light chain.~~

~~15~~ 10. ~~The method of claim 14~~ A method of tracking inflammation in a human subject previously subjected to the steps of: obtaining from the subject a first sample of peripheral blood mononuclear cells at a first time; contacting the first sample with a purified mAb that specifically binds to human IL-1α; and determining the percent of cells in the first sample that bind the monoclonal Ab, the method comprising the steps of:

(a) obtaining from the subject a second sample of peripheral blood mononuclear cells at a second time;

(b) contacting the second sample with the purified mAb that specifically binds to human IL-1α;

(c) determining the percent of cells in the second sample that bind the monoclonal Ab; and

(d) comparing the percent of cells in the first sample that bind the mAb to the percent of cells in the second sample that bind the monoclonal Ab,

wherein the purified mAb is a human IgG1 mAb comprising a heavy chain covalently joined to a light chain,

wherein the heavy chain comprises the amino acid sequence of SEQ ID NO: 9 and a light chain comprises the amino acid sequence of SEQ ID NO:11.

~~16~~ 11. A method comprising the steps of:

(a) enriching a biological sample obtained from a human subject using a filter that separates molecules according to molecular weight into a first fraction comprising intact IgG complexed with IL-1α and second fraction comprising molecules less than 100 Kda; and

(b) quantifying the amount of IL-1α in the first fraction.

~~17~~ 12. The method of claim 16, comprising the steps of:

(a) enriching a sample of plasma obtained from a human subject using a filter that separates molecules according to molecular weight into a first fraction comprising intact IgG complexed with IL-1α and second fraction comprising molecules less than 100 Kda;

(b) adding the first fraction to a substrate comprising immobilized anti-human IgG Abs under conditions that allow IgG in the first fraction to specifically bind the anti-human IgG Abs immobilized on the substrate;

(c) washing the substrate to remove material in the first fraction that does not specifically bind the immobilized anti-human IgG Abs;

(d) contacting the substrate washed in step (c) with an Ab that specifically binds human IL-1α under conditions that allows the Ab that specifically binds human IL-1α to specifically bind any human IL-1α bound to the substrate;

(e) washing the substrate to remove any of the Ab that specifically binds human IL-1α that is not bound to the substrate; and

(f) quantifying the amount of Ab that specifically binds human IL-1α remaining bound to the substrate after step (e).

13. A host cell into which has been introduced isolated nucleic acids comprising a first nucleic acid encoding the amino acid sequence of SEQ ID NO: 9 and a second nucleic acid encoding the amino acid sequence of SEQ ID NO: 11.

14. The host cell of claim 13, wherein the set of isolated nucleic acids is comprised within at least one expression vector.

15. The host cell of claim 13, wherein the host cell is a mammalian cell.

16. The host cell of claim 15, wherein the host cell is a Chinese hamster ovary cell.

17. A host cell which expresses a human or humanized monoclonal antibody that includes (i) an antigen-binding variable region that exhibits very high binding affinity for human IL-1α and (ii) a constant region that is effective at both activating the complement system though C1q binding and binding to Fc receptors, wherein the antigen-binding variable region and constant region of the monoclonal antibody are comprised within the amino acid sequences of SEQ ID NO: 9 and SEQ ID NO: 11.

18. A human IgG1 monoclonal antibody that specifically binds to IL-1α, wherein the monoclonal antibody comprises the amino acid sequence of an immunoglobulin produced by

expressing in a mammalian host cell a first nucleic acid encoding the amino acid sequence of SEQ ID NO: 9 and a second nucleic acid encoding the amino acid sequence of SEQ ID NO: 11.

19. The human IgG1 monoclonal antibody of claim 18, wherein the mammalian host cell is a Chinese hamster ovary cell.