

CLAIMS:

1. A method for determining the anti-inflammatory effect of an agent comprising contacting the cell with the agent in the presence of a deleterious bacterium or portion of such bacterium and detecting the presence of an indicator compound,
wherein the substantial absence of an indicator material signifies that agent is an anti-inflammatory agent.
2. The method of claim 1, wherein the cell is a eukaryotic cell.
3. The method of claim 1, wherein the cell is a prokaryotic cell.
4. The method of claim 1, wherein the indicator material is selected from the group consisting of molecules generated by the modulation of a toll-like receptor.
5. The method of claim 1, wherein the indicator material is selected from the group consisting of molecules generated by the modulation of TLR 2, TLR 3, TLR 4, TLR 5, TLR 7, and TLR 9.
6. The method of claim 1, wherein the indicator material is selected from the group consisting of molecules of the NF- κ B pathway.
7. The method of claim 1, wherein the indicator material is selected from the group consisting of cytokines and interleukins.

8. The method of claim 1, wherein the indicator material is selected from the group consisting of IL-1, IL-6, IL-8, IL-12, and TNF- α .
9. The method of claim 1, wherein the indicator molecule is detected directly.
10. The method of claim 1, wherein the agent is selected from agents exhibiting an MIC of less than about 20%.

CLAIMS:

1. A method of determining the anti-inflammatory effect of an agent comprising contacting the cell with the agent in the presence of a deleterious bacterium or portion of such bacterium and detecting the presence of an indicator compound wherein the substantial absence of an indicator material signifies that the agent is an anti-inflammatory agent, wherein the indicator material is selected from the group consisting of molecules generated by the modulation of a toll-like receptor.
2. The method of claim 1, wherein the cell is a eukaryotic cell.
3. The method of claim 1, wherein the cell is a prokaryotic cell.
4. The method of claim 1, wherein the indicator material is selected from the group consisting of molecules generated by the modulation of TLR 2, TLR3, TLR4, TLR 5, TLR 7, and TLR 9.
5. The method of claim 1, wherein the indicator material is selected from the group consisting of molecules of the NF- κ B pathway.
6. The method of claim 1, wherein the indicator material is selected from the group consisting of cytokines and interleukins.
7. The method of claim 1, wherein the indicator material is selected from the group consisting of molecules generated by the modulation of IL-1, IL-6, IL-8, IL-12 and TNF- α .

8. The method of claim 1, wherein the indicator molecule is detected directly.
 9. The method of claim 1, wherein the agent is selected from agents exhibiting an MIC of less than about 20%.
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