CLAIMS

1. A method of assaying peptidoglycans (PGNs) in a sample of glucose polymer, comprising:
   a) treating the sample of glucose polymer by sonication, heating, and/or alkalization;
   b) bringing the treated sample or a dilution thereof into contact with a recombinant cell expressing an exogenous TLR2 receptor (Toll-like Receptor 2) and a reporter gene under the direct dependence of the signaling pathway associated with the TLR2 receptor, said reporter gene coding for a colored or fluorescent protein or for a protein whose activity can be measured with or without substrate;
   c) measuring the reporter gene signal; and
   d) determining the amount of PGN in the sample using a calibration curve of the correspondence between the amount of PGN and the intensity of the reporter gene signal characterized in that said standard curve of correspondence between the quantity of PGN and the intensity of the reporter gene signal is standardized or calibrated with $PAM_3Cys\text{-}Ser\text{-}(Lys)_4$ trihydrochloride.

2. The method as claimed in claim 1, characterized in that treatment of the sample by sonication, heating, and/or alkalization makes it possible to fragment and disintegrate the PGNs contained in the sample, in particular so as to make them capable of activating the TLR2 receptor.

3. The method as claimed in claim 1 or 2, characterized in that treatment of the sample makes it possible to generate PGNs predominantly having a size of about 120 kDa.

4. The method as claimed in any one of claims 1-3, characterized in that the reporter gene is a secreted alkaline phosphatase.

5. The method as claimed in any one of claims 1-4, characterized in that the cell is a cell of the HEK-Blue™ hTLR2 line.

6. The method as claimed in any one of claims 1-5, wherein the standard curve of correspondence between the quantity of PGN and the intensity of the reporter gene signal is standardized or calibrated with $PAM_3Cys\text{-}Ser\text{-}(Lys)_4$ trihydrochloride, and wherein the calibration curve of the correspondence between the amount of PGN and the intensity of the reporter gene signal was prepared with PGNs derived from a bacterium selected from *Staphylococcus aureus, Micrococcus luteus, Bacillus subtilis* and *Alicyclobacillus acidocaldarius,* preferably from *Staphylococcus aureus, Micrococcus luteus,* and *Alicyclobacillus acidocaldarius*.

7. The method as claimed in any one of claims 1-6, characterized in that the method comprises a preliminary step of preparation of the calibration curve using PGNs derived from a bacterium selected from *Staphylococcus aureus, Micrococcus luteus, Bacillus subtilis* and *Alicyclobacillus acidocaldarius*.

8. The method as claimed in claim 1-5, wherein the standard curve of correspondence between the quantity of PGN and the intensity of the reporter gene signal is standardized or calibrated with $PAM_3Cys\text{-}Ser\text{-}(Lys)_4$ trihydrochloride, characterized in that the method comprises a preliminary step of preparation of the calibration curve using $PAM_3Cys\text{-}Ser\text{-}(Lys)4$ trihydrochloride.

9. The method as claimed in any one of claims 1-8, characterized in that the sample is diluted, if necessary, so as to generate a signal of the reporter gene corresponding to the linear portion of the calibration curve.

10. The method as claimed in any one of claims 1-9, characterized in that the sample is a sample of a solution of icodextrin.

11. A kit for assaying peptidoglycans (PGNs) in a sample of glucose polymers comprising:
    - a recombinant cell expressing an exogenous TLR2 receptor (Toll-like Receptor 2) and a reporter gene under the direct dependence of the signaling pathway associated with the TLR2 receptor, said reporter gene coding for a colored or fluorescent protein or for a protein whose activity can be measured with or without substrate; and
    - - a calibration curve of the correspondence between the amount of PGN and the intensity of the reporter gene signal, or a PGN standard, preferably derived from a bacterium selected from *Staphylococcus aureus, Micrococcus luteus, Bacillus subtilis* and *Alicyclobacillus acidocaldarius*, preferably from *Staphylococcus aureus, Micrococcus luteus,* and *Alicyclobacillus acidocaldarius*, optionally instructions for use, and a solution for pretreating the sample

said kit comprising $PAM_3Cys\text{-}Ser\text{-}(Lys)4$ trihydrochloride.