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(54) Title: COMPOUNDS AGAINST RALSTONIA PICKETTII FOR USE IN THE TREATMENT OF INSULIN RESISTANCE, AND METHOD OF DIAGNOSIS OF INSULIN RESISTANCE

(57) Abstract: The invention therefore provides a compound effective against *Ralstonia pickettii* for use in the treatment or prevention of insulin resistance, obesity or type II diabetes of a subject. Preferably, said compound is selected from the group consisting of an antibiotic effective against *Ralstonia pickettii*, an immunogenic compound capable of producing a protective immune response in a subject, and an antibody which specifically binds to *Ralstonia pickettii* or a binding fragment thereof. The invention further provides an in vitro method of diagnosis or prediction of insulin resistance, obesity or type II diabetes in a subject, comprising determining the presence of *Ralstonia pickettii* or the presence of an antibody which specifically binds to *Ralstonia pickettii* in a test sample of said subject. In another aspect, the invention provides the use of an antibody binding specifically to an antigen of *Ralstonia pickettii*, a *Ralstonia pickettii* cell, and/or a nucleic acid hybridizing under stringent conditions to a nucleic acid from *Ralstonia pickettii* in a method according to the invention. The invention further provides the use of a kit comprising said antibody, a nucleic acid as defined in above, and optionally comprising a *Ralstonia pickettii* bacteria or a nucleic acid or protein thereof, a further reagent or a conventional kit component.



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