## Claims

1. A mutant strain *Clostridium thermocellum* for producing cellulase and xylanase obtained from ultraviolet light induced genetic modification.

2. The mutant strain *Clostridium thermocellum* according to claim 1, wherein said mutant strain is *Clostridium thermocellum* M2_15-C8, accession number NITE ABP-02390.

3. The genetic modification process to produce the mutant strain *Clostridium thermocellum* according to claim 1 or 2, wherein said process comprises the ultraviolet radiation intensity from 40 to 100 microwatts per square centimeter to the wild type *Clostridium thermocellum* from 10 to 120 minutes.

4. The genetic modification process according to claim 3, wherein said process comprises the ultraviolet radiation intensity from 40 to 80 microwatts per square centimeter to the wild type *Clostridium thermocellum* from 15 to 60 minutes.

5. The genetic modification process according to claim 3, wherein said process is operated under anaerobic condition.

6. A production process of cellulase and xylanase comprising the cultivation step of the mutant strain *Clostridium thermocellum* according to claim 1 in carbon source, wherein the bacteria to carbon source ratio is in a range of 0.1 to 1.0 g bacteria to g carbon source under temperature in a range of 55 – 65 °C for 24 – 96 hours.

7. The production process of cellulase and xylanase according to claim 6, wherein the bacteria to carbon source ratio is in the range of 0.2 to 0.5 g bacteria to g carbon source.

8. The production process of cellulase and xylanase according to claim 6, wherein the carbon source is selected from cellulose powder, rice straw, bagasse, or mixture thereof.

9. The production process of cellulase and xylanase according to claim 8, wherein the carbon source is bagasse.

10. The production process of cellulase and xylanase according to claim 6, wherein said process is operated at the temperature of 60 °C.

11. The production process of cellulase and xylanase according to claim 6, wherein said process is operated in the range of 48 – 72 hours.

12. The production process of cellulase and xylanase according to claim 11, wherein said process is operated about 72 hours.

13. The production process of cellulase and xylanase according to any one of claims 6 - 12, wherein said process is operated under anaerobic condition.

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