

## Thermophilic Microorganism Host for Production of Industrial Solvents

### **Disclosure Number**

200201059

### **Technology Summary**

The subject invention disclosed herein is a facultative microorganism isolated from goat manure capable of high growth rates at 55°C, pH 5, and tolerant of the presence of at least 50 g/L ethanol. The microorganism of the subject invention is a suitable host for making genetically engineered organisms for production of industrial solvents such as ethanol, butanol, etc., from renewable materials such as corn starch and lignocellulosics in simultaneous saccharification and fermentation (SSF) processes. In this process, hydrolysis of corn starch or lignocellulosics and fermentation of the released sugars are performed in one single reactor instead of two separate reactors which is the case if mesophilic organisms (only grow at 30-40°C) are used. This will result in considerable savings due to lower capital costs, lower energy requirements, simpler operations, and easier product recovery.

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### **Licensing Contact**

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