

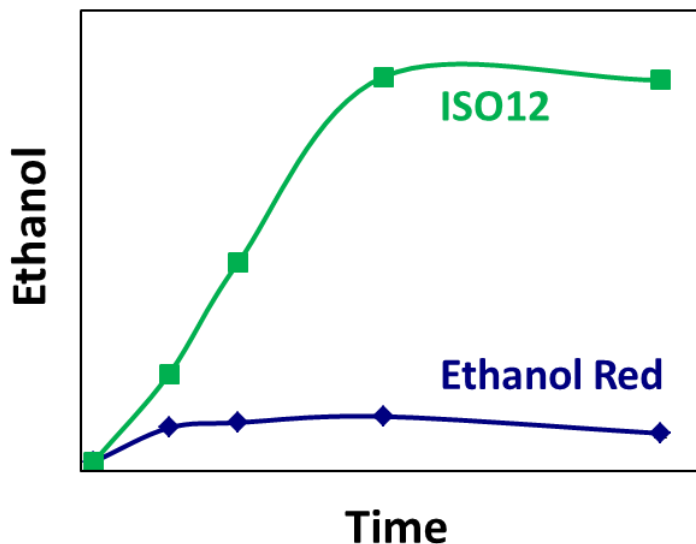
### Industrial Yeast Strain combining inhibitor and temperature tolerance

#### Explanation and Purpose

An industrial *Saccharomyces cerevisiae* strain named ISO12 and derived from the industrial strain Ethanol Red, has been isolated from a long-term adaptation experiment using spruce hydrolysate and increasing temperature.

In contrast with Ethanol Red, ISO12 is able to grow and ferment undetoxified spruce hydrolysate at 39°C without prior strain adaptation (Figure 1).

ISO12 represents a good platform for strain engineering as well as for the identification of tolerance factors.



**Figure 1:** Ethanol production from undetoxified spruce hydrolysate at 39°C

## Novel Microbes and Enzymes for 2<sup>nd</sup> Generation Bioethanol Production



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