



Reagent kit for ICgene

Analysis kit for icgene

→ TECHNICAL DESCRIPTION

The package contains the reagents necessary for the operation of **icgene** with different types of contaminants:

- *Brettanomyces bruxellensis*: to carry out a real-time analysis on wine samples, rinsing water, wooden surfaces (after buffering); it is the ideal procedure to eradicate *Brettanomyces bruxellensis* or to keep the cellar free from this microorganism. A low cost and easily reproducible analysis, it allows checking every single batch of wine, in order to be able to manage the cellar flows in complete safety. Such a simple system makes it possible to check the correct cleaning process, aimed at eliminating the problem or the treatment on wine, in order to eradicate this contaminating yeast.

- *Botrytis cinerea*: due to causes linked to the grape transport or to the intense harvesting production flows, the contamination of *Botrytis cinerea* would often go unnoticed in the must, showing its negative effects when the processing has already begun. It is known that this mold, if managed wisely and if the oxidative effects due to the presence of laccase are reduced to a minimum, does not excessively compromise the quality of the wines obtained, limiting the difficulty of processing the must to the clarification process (because of the high presence of glucans). If recognized, the problem can be easily eliminated from the early stages, also eliminating the organoleptic negative effects of this contaminant with products of the *Antibotrytis* range.

- *Salmonella spp*: the microorganisms of this family are responsible for the majority of food-borne gastrointestinal diseases. For this reason, the presence of *Salmonella spp.*, even in small quantities, is forbidden in all foodstuff. The search for the presence in foodstuff carried out in a classical way, with pre-enrichment, enrichment and isolation on selective medium, requires at least 5 days. The time required by the **icgene** method requires only 3 days instead.

- *Escherichia coli*: even if only a few *E. coli* biotypes are pathogenic, the presence of all the species in foodstuff is considered as Fecal Contamination Index, occurring between the food itself, for human contact and for utilization of non-potable water. The official method for research in foodstuff requires 3 to 4 days, which can be reduced to a few hours using the **icgene** method.

- *Listeria spp*: the presence of *Listeria monocytogenes* in foodstuff has aroused more and more interest in the last thirty years, because associated with serious pathological states, even fatal, especially in individuals with low immune defences. For this reason, the presence of *Listeria monocytogenes* in foodstuff is tolerated in low numbers in Europe and prohibited in many nations, including United States and Japan. A rapid identification method is therefore particularly useful for those interested in exporting to these markets, because it would be possible to free production lots in a short time. The official search for *Listeria spp.* in food takes a period of 5 days, which can be reduced to just 2 days using the **icgene** method.





Reagent kit for ICgene

- *Campylobacter spp*: campylobacteriosis is one of the most common gastrointestinal bacterial diseases in the world and its incidence rate has exceeded in some European countries the one related to salmonellosis. In fact, its spread in the last 10 years has registered an increase and represents a public health problem of considerable socio-economic impact. The classic isolation of *Campylobacter* in food is carried out with enrichment and subsequent growth on selective medium. The research lasts 4 days. With the **icgene** method, it is possible to have the result in a few hours.

The kit contains all the buffer solutions for DNA extraction from wine samples and for the amplification of specific DNA segments.

→ COMPOSITION AND TECHNICAL CHARACTERISTICS

The kit includes all the reagents necessary to carry out the amplification:

- DNA extraction buffers
- DNA extraction columns
- micro tubes for amplification.

→ STORAGE

Store in the fridge at a temperature below 4°C.

