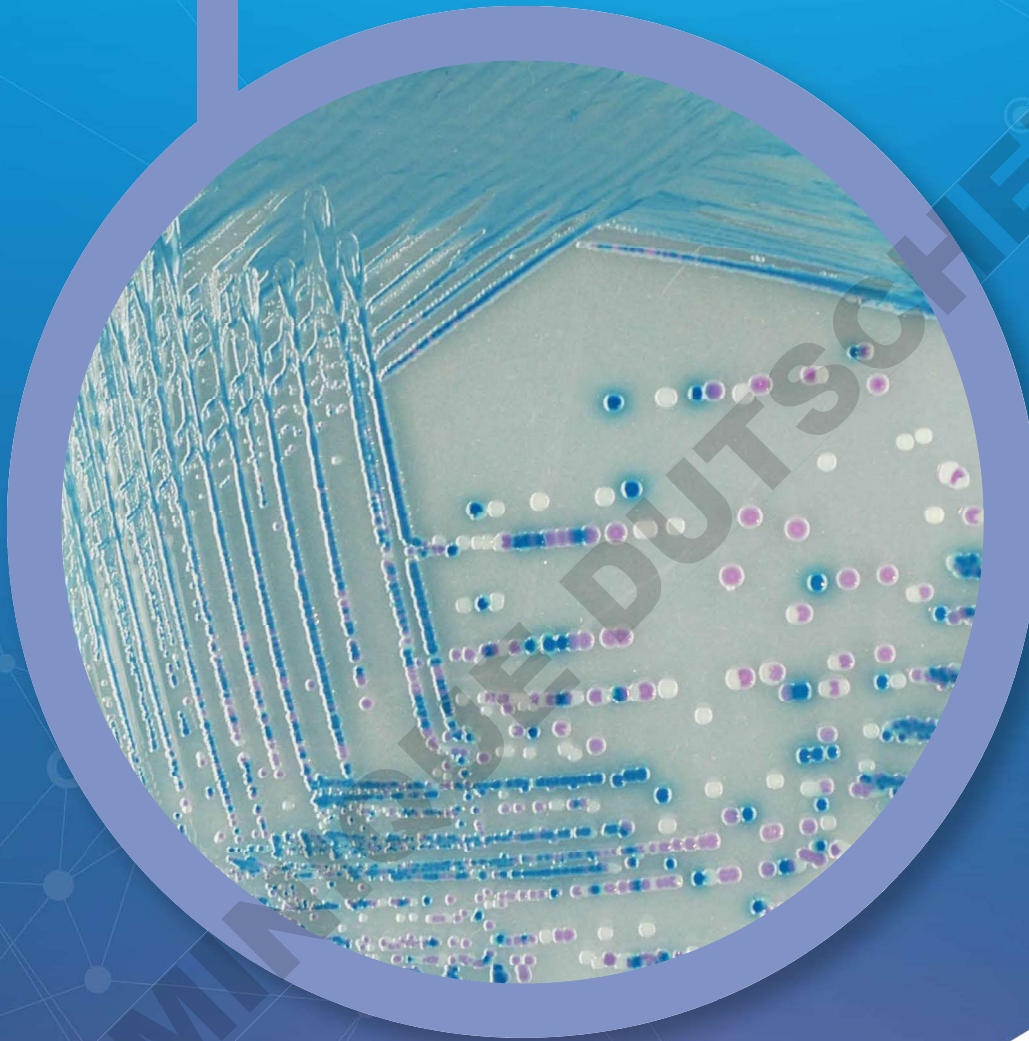
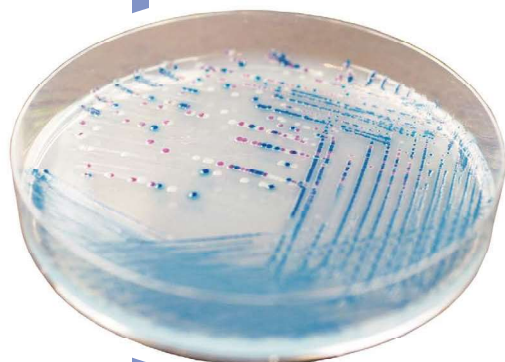


# ● CHROMagar™ O157

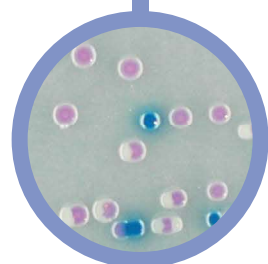


**For the selective isolation and differentiation  
of *E. coli* O157**



## Plate Reading

- *E. coli* O157  
→ mauve
- Other bacteria  
→ steel blue, colourless or inhibited



## For the selective isolation and differentiation of *E. coli* O157 in food and animal samples

### Background

*Escherichia coli* (*E. coli*) are bacteria commonly found in the gut of humans and warm-blooded animals. Most strains of *E. coli* are harmless. Some strains, however, such as Verocytotoxigenic *E. coli* (VTEC), also known as Shigatoxigenic *E. coli* (STEC) can cause severe foodborne diseases. Enterohaemorrhagic *E. coli* (EHEC) are a subset of VTEC, which can cause severe disease in humans such as Haemolytic Uraemic Syndrome (HUS). VTEC have been isolated from the gut contents of many animals, including cattle and sheep. VTEC are mainly transmitted to humans primarily through consumption of contaminated foods, but can also be transmitted through handling animals carrying these bacteria.

The *E. coli* serotype O157:H7 or its non-motile variant O157:H- is the most common VTEC serotype in relation to public health. Its significance was recognized in 1982, following two outbreaks in the USA. Since then, more than 180 outbreaks have been reported worldwide, with an estimated W.H.O figure of 70,000 infections per year.

### Medium Performance

#### 1 EASIER DETECTION COMPARED TO SMAC

*E. coli* O157 is detected by a characteristic mauve colour after only 24 h of incubation, while most other *E. coli* are blue.

The conventional medium for the detection of *E. coli* O157 is Sorbitol MacConkey (SMAC) Agar, which has very poor specificity, thus exhibiting an abundance of false positives (*Proteus*, *E. hermannii*, etc.). Sorbitol MacConkey Agar is also difficult to read because there is a change of colouration in the case of prolonged incubation.

#### 2 HIGH SENSITIVITY

*E. coli* O157 → 89 %\*

\*Sensitivity from scientific study: K.A. Bettelheim, 1998. Reliability of CHROMagar™ O157 for the detection of enterohaemorrhagic *E. coli* (EHEC) O157 but not EHEC belonging to other serogroups. J.Appl.Microbiol.85:425-428.

#### 3 FLEXIBILITY

Gain flexibility using powder rather ready to use plates.

### Medium Description

Powder Base	
Total .....	29.2 g/L
Agar .....	15.0
Peptone and Yeast extract .....	13.0
Chromogenic mix .....	1.2
Storage at 15/30 °C - pH: 6.9 ± 0.2	
Shelf Life .....	> 18 months

Usual Samples	food, meat trimmings, animal faecal samples
Procedure	Direct streaking or after an appropriate enrichment step of the sample. Incubation 24 h at 37 °C.
Scientific Publications on this product: available on <a href="http://www.CHROMagar.com">www.CHROMagar.com</a> Please read carefully the instructions for use (IFU document) available on <a href="http://www.CHROMagar.com">www.CHROMagar.com</a>	

## Order References

Please use these product references when contacting your local distributor:

5000 mL pack ..... EE222  
25 L pack ..... EE223-25

Manufacturer: CHROMagar, 29 avenue George Sand, 93210 La Plaine Saint-Denis - France  
Email: [CHROMagar@CHROMagar.com](mailto:CHROMagar@CHROMagar.com)  
Website: [www.CHROMagar.com](http://www.CHROMagar.com)  
Find your nearest distributor on [www.CHROMagar.com/contact](http://www.CHROMagar.com/contact)