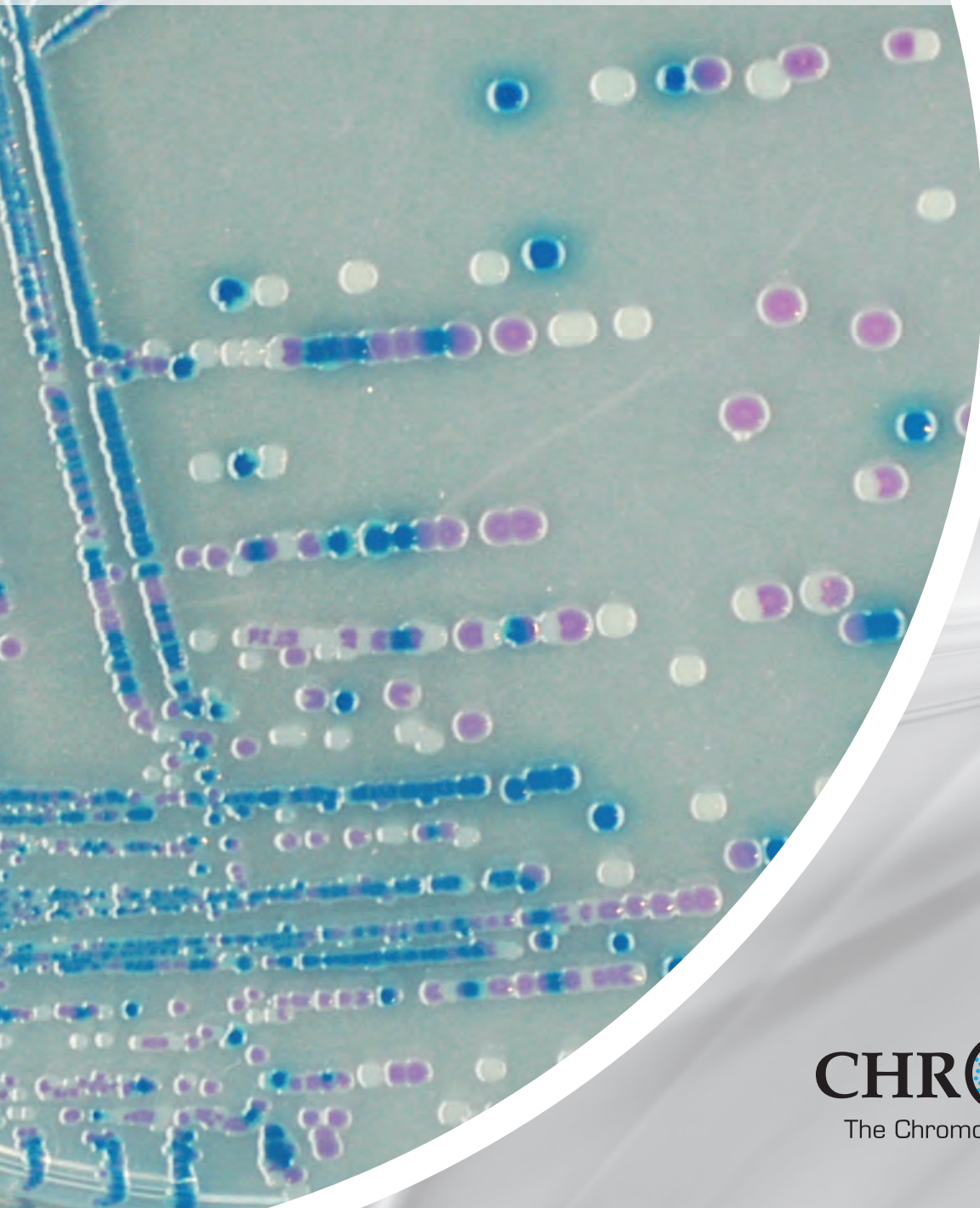


IVD solutions through partnership



CHROMagar™ O157

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



CHROMagar™
The Chromogenic Media Pioneer

● CHROMagar™ O157

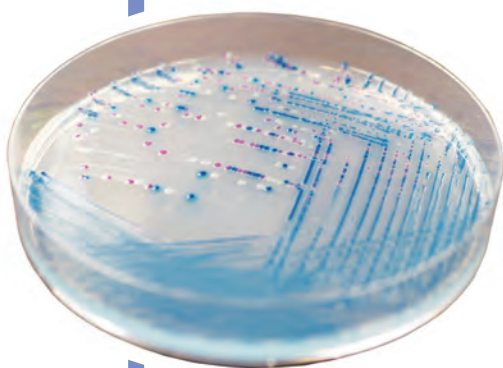
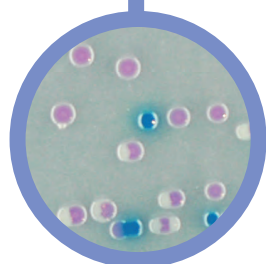


Plate Reading

- *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 24h 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 Polyvalence

This medium can also be used with clinical specimens.

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 www.CHROMagar.com
Please read carefully the instructions for use (IFU document) available on www.CHROMagar.com

Manufacturer:

CHROMagar
4 place du 18 juin 1940 75006 Paris - France
e-mail: CHROMagar@CHROMagar.com
www.CHROMagar.com

Distributed by:
Mast Diagnostica GmbH
Feldstraße 20
DE-23858 Reinfeld

Tel: +49 (0)4533 2007 0
Fax: +49 (0)4533 2007 68
e-mail: mast@mast-diagnostica.de
www.mast-group.com

Ordering Information

Product	Order Code
CHROMagar™ O157 dry media, 5 liter	15EE222
CHROMagar™ O157 ready to use plates, 20 pcs.	201430