中科迈晨

PRODUCT DATASHEET

KSOM Medium (modified)

Cell Culture Medium

CATALOG NUMBER: CE002

PRODUTCT DESCRIPTION: KSOM, a single potassium optimized medium for *in vitro* culture of mouse oocytes, has been enhanced by increasing the potassium concentration from its predecessor, Simple Optimized Medium (SOM). Overcoming the two-cell block observed in SOM, KSOM leads to higher blastocyst yields, increased rates of trophoblast cell division, and better support for oocyte to blastocyst development in inbred mice.

Our modified version of KSOM incorporates additional amino acids to further support embryo development.

Buffered with HEPES and MOPS to maintain critical pH levels during *in vitro* processing, this unique modification allows for the streamlined harvesting and culturing of pre-implantation mouse embryos using a single medium. By eliminating the need for a two-step process traditionally involving HEPES-buffered medium for harvesting and bicarbonate-buffered medium for culturing, our modified KSOM simplifies the workflow and enhances blastocyst formation rates across multiple mouse strains.

This medium can be utilized for both atmospheric conditions and CO_2 incubator cultures, eliminating the requirement for pre-equilibration at the time of embryo harvesting, though pre-equilibration before culture is recommended.

FORMULATION: Ready-to-use, sterile filtered solution

PACK SIZE: 50mL

STORAGE/STABILITY: Store at -20°C until expiration date. Use within 2 weeks after thawing at 4°C.

REFERENCES:

1. Lawitts, J.A. Biggers, J.D. Optimization of mouse embryo culture media using simplex methods. J Reprod Fert 91:543-556 (1991).
2. Lawitts, J.A. Biggers, J.D. Joint effects of sodium chloride, glutamine, and glucose in mouse preimplantation embryo culture media. Mol Reprod Dev 31:189-194 (1992).
3. Lawitts, J.A. Biggers, J.D. Culture of preimplantation embryos. In "Methods in Enzymology: Guide to Techniques in Mouse Development". P.M. Wasserman and M.L. DePomphilis (eds.) 225:153-164. Academic Press. 1993
4. Erbach, G.T. Lawitts, J.A. Papaioannou, V.E. Biggers, J.D. Differential growth of the mouse preimplantation embryo in chemically defined media. Biol. Reprod. 50:1027-1033 (1994).

MACGENE Biotechnology ● Phone: (010)8205-7786 ● (010)6237-9789

E-mail: order@macgenes.com ● Tech Support: support@macgenes.com ● URL: http://www.macgene.com