AventaCell BioMedical Co., Ltd.

BSSub™-XF Cell Culture Supplement

Description

BSSub™-XF is a media supplement which can successfully replace FBS (fetal bovine serum) in cell culture medium for the in vitro cultivation of a wide variety of mammalian cell types. BSSub™-XF has been used with a variety of cells of primary origin and established cell lines. BSSub™-XF is a non-xenogeneic formulation and does not contain bovine or other animal-derived proteins.

Features and Benefits

- ✓ Cost-effective, non-xenogeneic / FBS substitute
- ✓ Natural source and natural signal for cell growth
- ✓ Abundant growth factors / cytokines / proteins
- ✓ Replace 5 to 20 % FBS with only 2-10% BSSub™-XF
- ✓ Better performance in primary and expansion cultures
- ✓ Lot-to-lot consistency
- ✓ Easy to use and store

Intended Use

BSSub™-XF media supplement supports the growth of a wide variety of both non-adherent and adherent cell lines. BSSub™-XF has twice the potency of fetal bovine serum (i.e. 2-10% of BSSub™-XF media supplement is equivalent to 5-20% fetal bovine serum in the medium).

Turbidity may develop in BSSub™-XF cell culture supplement. Published research has determined that turbidity will not alter the performance of the product.

Application

Cells successfully tested with BSSub™-XF cell culture supplement:

Cancer Cells: - Leukemia cell lines (KG-1, K562, JURKAT, HL-60) - Hepatocellular carcinoma cell lines (HepG2) - Cervical cancer cell lines (HeLa) - Breast cancer cell lines (MCF-7) - Neuroblastoma cell lines (Neuro-2a)	Other Cells: - Corneal epithelial cell - Epithelial cell lines (HEK293) - Endothelial colony-forming cells (ECFC) - Endothelial cell lines (HUVECs, OEC, LEC) - Fibroblast - Keratinocyte cell lines (HaCaT) - Hepatocyte - Myoblast cell lines (C2C12) - CHO cell
Stem Cells	Immune Cells

Quality Control Tests

Tests usually performed on BSSub™-XF are:

- ✓ Physicochemical parameters:
  - pH
  - Protein concentration
  - Sterility control
  - Endotoxin
  - Mycoplasma
- ✓ Proliferation capacity on human Mesenchymal stem cells

Storage

-20˚C to -80˚C

Product Use Statement

THE PRODUCT IS FOR RESEARCH USE ONLY. Not approved for human or veterinary use.

References

1. Ranzato, E. *et al.* (2008) Platelet lysate stimulates wound repair of HaCaT keratinocytes. British Journal of Dermatology 159(3):537-545
2. Rauch, C. *et al.* (2011) Alternatives to the use of fetal bovine serum: human platelet lysates as a serum substitute in cell culture media. ALTEX 28(4):305-316
3. Tolosa, L. *et al.* (2011) Influence of Platelet Lysate on the Recovery and Metabolic Performance of Cryopreserved Human Hepatocytes Upon Thawing. Transplantation 91(12):1340-1346
4. Griffiths, S. *et al.* (2013) Human platelet lysate stimulates high-passage and senescent human multipotent mesenchymal stromal cell growth and rejuvenation in vitro. Cytotherapy. 15(12):1469-83.
5. Hofauer, P. *et al.* (2014) Human platelet lysate is a feasible candidate to replace fetal calf serum as medium supplement for blood vascular and lymphatic endothelial cells. Cytotherapy 16(9):1238–1244
6. Tasev, D. *et al.* (2015) Long-Term Expansion in Platelet Lysate Increases Growth of Peripheral Blood-Derived Endothelial-Colony Forming Cells and Their Growth Factor-Induced Sprouting Capacity. PLoS ONE 10(6): e0129935

Ordering Information

Catalog Number	Product	Volume (mL)
HPCBSCRL05	BSSub™-XF	50
HPCBSCRL50		500

For Technical and Ordering information, contact:

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For additional technical information such as Safety Data Sheets (SDS), Certificates of Analysis, visit www.atcbiomed.com. For further assistance, email sales@atcbiomed.com