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:

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

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
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

Ordering Information

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Product</th>
<th>Volume (mL)</th>
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<tbody>
<tr>
<td>HPCBSCRL05</td>
<td>BSSub™-XF</td>
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<tr>
<td>HPCBSCRL50</td>
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<td>500</td>
</tr>
</tbody>
</table>

For Technical and Ordering information, contact:
AventaCell BioMedical Co., Ltd.
575 Fourteenth Street, NW Atlanta, GA 30318 USA (Manufacturing)
Website: www.atcbiomed.com
Email: sales@atcbiomed.com

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

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