



SPECIAL MEDIA GUIDE

Hybridoma Express Media

Insect Cell Culture Media

SF-4 Baculo Express Medium

BSK-H Medium for the cultivation
of *Borrelia spec.*

Stem Cell Media

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Who we are

At BioConcept Ltd. we are proud of the progress we have made since our foundation in 1978.

We have been producing within a certified quality management system since 1995 and our new cell culture and sterile liquid production plant has vastly improved our already high standards. BioConcept Ltd.'s expansion into the tissue culture market in 1992 allowed us to meet the needs of the sophisticated and evolving pharmaceutical and bio-pharmaceutical markets.

The strength and focus of BioConcept Ltd. lies in manufacturing customized cell culture media as well as defined media for recombinant protein production. Beside that BioConcept Ltd. offers all standard (classical) media and solutions. Furthermore, the production facilities are superbly equipped to manufacture sterile QC liquids, microbial broths and agars. Our water preparation facilities are specifically engineered to efficiently generate the highest standard Water For Injection (WFI) available.



Our product line includes

- Special customer-designed media
- Contract manufacturing of sterile liquids and powder formulations
- Production media for CHO, Hybridoma and Insect Cells
- Individual solutions for your cell culture requirements
- Complete cell systems applications for CHO cells
- Standard media
- Serum-free and ACF (Animal Component Free) media
- Liquid as well as powder media formulations
- Buffers and balanced salt solutions
- Supplements and auxiliary reagents
- Animal sera

In addition to the broad range of cell culture products, we can offer the highest degree of flexibility and customization in a timely manner.

Our customers have the following options

- Modifications of standard products
- New products according to customers recipes
- Outsourcing of media production
- Variable batch sizes starting from 5 L up to 5000L (liquid) and 2 kg up to 800 kg (powder)
- Variable packaging sizes (1 ml up to 1000L) and packaging systems (PET/glass bottles, sterile bags, customized tubing systems, as well as customer specifications)
- Sterilization through sterile filtration (0.22 µm) or hot air/vapour sterilization

Customized products can be delivered within six to eight weeks after the order has been placed, including QC. For more detailed information please contact us at info@bioconcept.ch.

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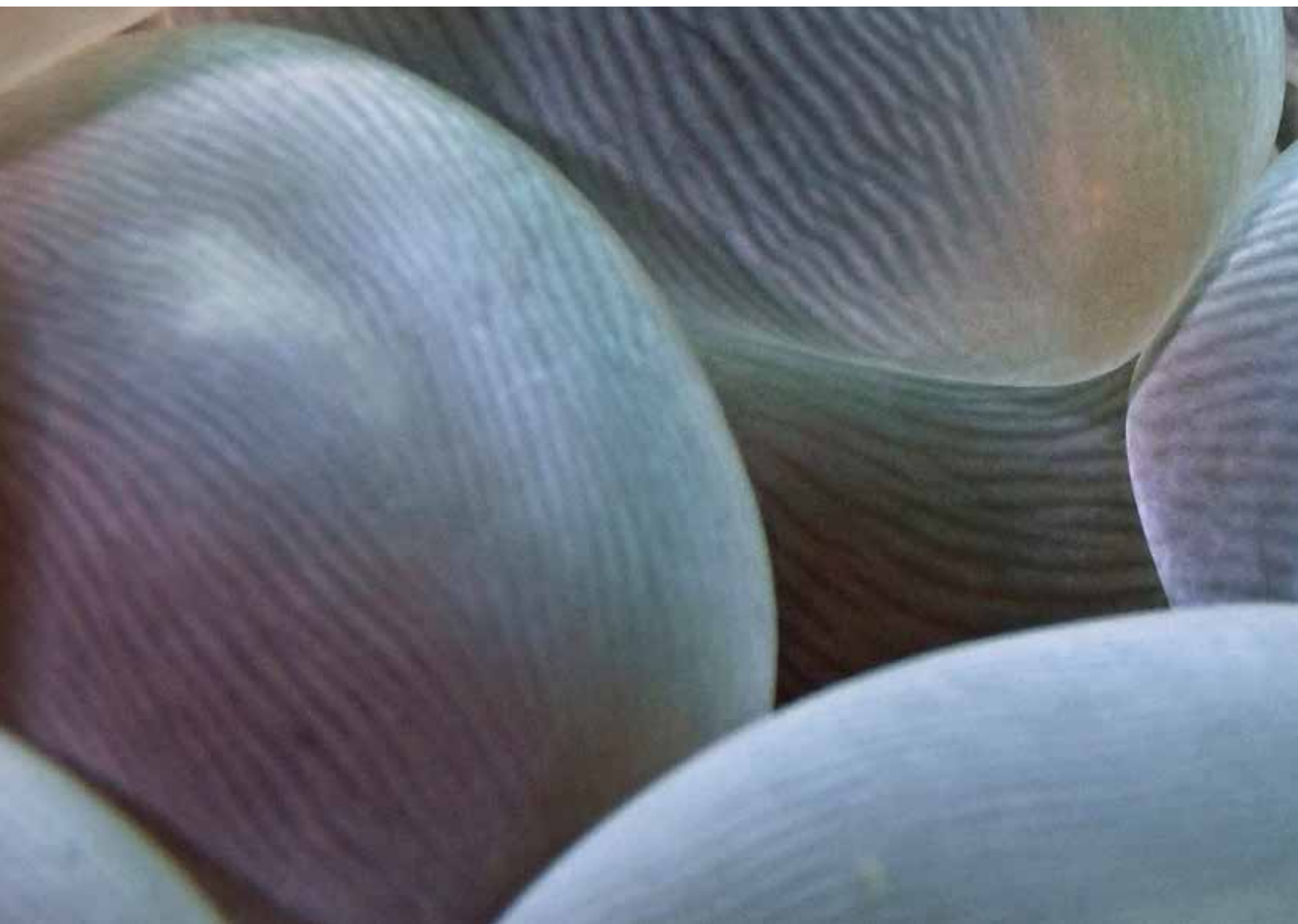
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Express Media for Hybridoma Cells

HYGM 6 and 7 Express Media

Hybridoma Growth Media (HYGM) 6 and 7 are serum free and fully defined media that can be used for the cultivation of various different hybridomas and the production of monoclonal antibodies. Both media are available with or without phenol red to prevent interference of the dye with chromogenic assays.

HYGM-6 and 7 media are ready to use.

HYGM-6 Medium is a serum free medium and contains recombinant insulin for therapeutic use. It is the only protein in that medium, no other proteins or undefined hydrolysates are present. HYGM-7 Medium is a chemically defined medium and does not contain any undefined hydrolysates or proteins.

ISF-1 Serum-free medium for Hybridoma cell culture

ISF-1 is a serum-free, chemically defined medium for hybridoma cell culture and monoclonal antibody production. It contains Glutamine and does not require further supplementation. To protect cells from shear forces during production, surfactant is included in the medium. ISF-1 is not suitable for cholesterol dependent cell lines (e.g. NSO and its variants), without further supplementation of lipoprotein.

The BSA used in ISF-1 is EDQM-certified. The addition of antibiotics should not be a substitute for proper sterile techniques. Therefore, use of antibiotics is in most cases neither necessary nor advised. However, in those instances where antibiotics are desired, ISF-1 has been shown to be compatible with the most used antibiotics (e.g. gentamycin, puromycin and amphotericin B).

Available Hybridoma Growth Media

Cat. No.	Description	Size	Serum free	Protein free	Animal Component free (ACF)	Formulation
Express Media for Hybridoma cells						
9-00F55-I	HYGM-6 Express, with phenol red	500 ml	×			Proprietary
9-00F57-I	HYGM-6 Express, w/o phenol red	500 ml	×			Proprietary
9-00F58-I	HYGM-7 Express, w/o phenol red	500 ml		×	×	Proprietary
9-00F67-I	HYGM-7 Express, with phenol red	500 ml		×	×	Proprietary
1-57S97-I	ISF-1 Hybridoma Growth Medium	500 ml	×		×	Proprietary

Other modifications are available upon request at info@bioconcept.ch.

Available Insect Cell Culture Media

Cat. No.	Description	Size	Serum free	Protein free	Formulation
9-00F38-I	SF-4 Baculo Express ICM "ready to use"	500 ml	×	Contains yeast extract as only undefined component	Proprietary
9-00F38-K	SF-4 Baculo Express ICM "ready to use"	1 L	×	Contains yeast extract as only undefined component	Proprietary
9-07S38-I	SF-4 Baculo Express (1.1 × conc.) w/o yeast extract, w/o L-Valine	500 ml	×	×	Proprietary
9-10S38-I	SF-4 Baculo Express (1.1 × conc.) w/o yeast extract, w/o L-Methionine	500 ml	×	×	Proprietary
9-05S38-I	SF-4 Baculo Express (1.1 × conc.) w/o yeast extract, w/o L-Tyrosine	500 ml	×	×	Proprietary
9-02S38-I	SF-4 Baculo Express (1.1 × conc.) w/o yeast extract, w/o amino acids	500 ml	×	×	Proprietary
1-12F20-I	TC-100 Insect Cell Culture Medium	500 ml	Heat Inactivated Serum needs to be added		
1-12F07-I	Grace's Insect Cell Culture Medium	500 ml	Heat Inactivated Serum needs to be added		See page 56 of the main catalogue
1-43F00-I	Schneider's <i>Drosophila</i> Medium w/o L-Gln	500 ml		×	See page 59 of the main catalogue
1-43F02-I	Schneider's <i>Drosophila</i> Medium with L-Gln	500 ml		×	See page 59 of the main catalogue
1-34F00-I	Mitsuhashi and Marmorosh	500 ml	Contains Lactalbumin- hydrolsate and yeast extract		See page 58 of the main catalogue

Other modifications are available upon request at info@bioconcept.ch.

SF-Baculo Express Media

Extensive further development and further investigation on the nutritional needs of insect cells, based on the excellent performance of SF-1, resulted in our new improved “ready to use” insect medium. Already successfully used in different academic and industrial laboratories, SF-4 show following improvements:

1. Cell density: Densities up to 2×10^7 cells/ml could be achieved using SF-4 in bioreactors and spinner flasks
2. Versatility: Not only suitable for SF9 and SF21 but also High Five™ and *Drosophila* cells
3. Adaptation: Only few passages are needed, if you switch from your current serum supplemented medium (e.g. TC-100 or Grace's). Direct switch from your current serum free (but not protein free) medium is possible for some of the commercially available media
4. Protein yield: Results indicate an increased protein yield (1.5–2.7 times) in recombinant protein production compared to previously used media

SF-4 Baculo Express ICM (Insect Culture Medium)

9-00F38, Ready to use, no supplementation required. Formulation proprietary.

SF-4 Baculo express medium is a proprietary formulation which has successfully been used to grow various *Spodoptera frugiperda* (SF9, SF21) , BTI-TN-5B1-4 (High Five™) and *Drosophila melanogaster* (D.Mel-2) cells.

Amino acid depleted SF-4 medium (Cat. No: 9-02S38-I, 9-05S38-I, 9-10S38-I) is an efficient reagent for isotope labeling in NMR studies.

Other modifications are available upon request at info@bioconcept.ch.

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BSK-H Medium for the Cultivation of *Borrelia spec.*

BSK-H medium is a high quality nutrient liquid for the reliable cultivation of *Borrelia spec.* BSK-H medium is a quite complex formulation with an extraordinary high content of proteins and peptides. It is especially rich in nucleosides, glucose as energy source and contains high concentrations of vitamins. The medium contains N-Acetyl-D-Glucosamine which is an essential element of the bacterial peptidoglycan.

Only selected reagents of highest quality are used for the production of BSK-H medium. A special galenic as well as a gentle and controlled process guarantee a product of highest quality with reliable lot to lot constancy, stability, purity and reliable cell growth. A sufficient high amount of HEPES guarantees a stable buffer capacity for a long time. The concentration of CO₂ as well as the pH value have to be controlled carefully, because in some cases, due to metabolisation of glucose in long-term cultures, lactic acid accumulation occurs, which may result in a reduction of the pH-value of more than 1 pH unit. At room temperature the pH value is 7.6±0.2 at an osmolality of 420±20 mOsm/kg H₂O. The ready-to-use medium has to be supplemented with 3–8 % rabbit serum prior to inoculation. Storage temperature and stability are according to lot-specific label.

BSK-H medium can be widely used for the cultivation of *spirochetes*, especially for *B. burgdorferi* and *B. hermsii*. Only small amounts of organisms are sufficient for the inoculation. However, the values found in the literature, as well as personal communications are varying too much, so that no general recommendation for the inoculum number can be given. The generation time lies between 11 and 18 hours, so that in 7 to 9 days 0.5–4.0 × 10⁸ cells/ml can be obtained. The optimal incubation temperature lies between 30 °C and 37 °C.

Available BSK-H Media

Cat. No	Description	Size
1-10S02-H	BSK-H Medium with L-Glutamine	100 ml
1-10S02-I	BSK-H Medium with L-Glutamine	500 ml
1-10S03-I	BSK-H Medium without L-Glutamine	500 ml

Stem Cell Media and Supplements

Human Mesenchymal Stem Cell (hMSC) proliferation medium

Media for culturing hMSC delivered as a basal medium with supplements.

Cat. No	Modification	Size
11-01F03-I	hMSC proliferation medium, basal	500 ml
11-01F04-KIT	hMSC proliferation medium FCS kit	Kit
11-01F05-KIT	hMSC proliferation medium FCS supplement kit	Kit

Human Mesenchymal Stem Cell (hMSC) chondrogenesis induction medium

The hMSC chondrogenesis induction medium induces chondrogenic differentiation of hMSCs. The medium is delivered as a basal medium with supplements.

Cat. No	Modification	Size
11-01F08-I	hMSC chondrogenesis induction medium basal, serum free	500 ml
11-01F09-KIT	hMSC chondrogenesis induction kit, serum free	Kit

Human Mesenchymal Stem Cell (hMSC) osteogenesis induction medium

The hMSC osteogenesis induction medium induces osteogenic differentiation of hMSCs. The medium is delivered as a basal medium with supplements.

Cat. No	Modification	Size
11-01F10-I	hMSC osteogenesis induction medium, basal	500 ml
11-01F11-KIT	hMSC osteogenesis induction medium FCS kit	Kit
11-01F12-KIT	hMSC osteogenesis induction medium FCS supplement kit	Kit

Human Mesenchymal Stem Cell (hMSC) adipogenesis induction medium

The hMSC adipogenesis induction medium induces adipogenesis differentiation of hMSCs. The medium is delivered as a basal medium with supplements.

Cat. No	Modification	Size
11-01F06-I	hMSC adipogenesis induction medium, basal	500 ml
11-01F07-KIT	hMSC adipogenesis induction medium FCS supplement kit	Kit

Cancer Stem Cell Medium

Media for culturing human cancer stem cells delivered as a basal medium with supplements.

Cat. No	Modification	Size
11-01F01-I	Cancer stem cell medium, basal, serum free	500 ml
11-01F02-KIT	Cancer stem cell medium kit, serum free	Kit

All stem cell media formulations are optimized for initial seeding of 6000 cells/cm² up to a confluence of approximately 90%. Feeder-layer, matrix substrates or other substances are not necessary. Due to the possibility of reduced proliferative activity, we recommend the use of antibiotic supplement for freshly isolated cells only.

BIT 9500 Serum Substitute

Developed for use in serum-free culture conditions with defined composition.
Contains bovine serum albumin (BSA), insulin and transferrin in Iscove's IMDM.

Product Properties:

- Store at –20 °C.
- pH is set at 7.1–7.5 and osmolality at 300±20 mOsm/kg.
- Thaw at room temperature (15–20 °C) or overnight at 2–8 °C. Swirl the bottle to mix its content. Store at 2–8 °C for up to 1 month. Alternatively, aliquot and store at –20 °C. After thawing the aliquots, do not refreeze. Use BIT 9500 at a final concentration of 20 %.
- Contains bovine serum albumin, recombinant human insulin, human transferrin (iron-saturated), Iscove's IMDM.
- This product should be considered potentially infectious and treated in accordance with universal handling precautions.
- Not intended for any human or animal diagnostic or therapeutic use.

Cat. No	Description	Size
5-18S02-H	BIT 9500 Serum Substitute	100 ml

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