

Technical Data Sheet

Serum-free multi-purpose Medium (ready-to-use)

for adherent and suspension cells

for cell biology

Order number: 2485

This medium is a fully defined, ready-to-use complete medium for serum-free cultivation of adherent and non-adherent cells. It is based on a classical and proven media formulation optimized for serum-free use by adding several additives such as vitamins, trace elements, albumin, cholesterol and soy lipids. Growth factors and attachment factors were intentionally avoided in order to limit the range of use and cell type as little as possible. As a result, a wide variety of cells can be cultured in *Serum-free multi-purpose Medium*.

Application

Serum-free multi-purpose Medium is intended for cell cultivation without FBS and under defined conditions (protein and animal-derived components < 0.2 % w/v, Hydrolysates < 0.001 % w/v). It is suitable for a number of different cell types and cell lines including CHO cells, fibroblasts, HeLa cells, HL60 cells, hybridoma, HEK cells, carcinoma cells, lymphocytes, macrophages, melanocytes and megakaryocytic cell lines (HEL, Dami, CMK) and many others.

Since no growth factors have been added to the medium, it is possible to investigate their mode of action on the respective cells by selective addition. Studies on the efficacy of added growth factors thus become clearer in their conclusions.

Instruction for use

A change from serum-containing medium to *Serum-free multi-purpose Medium* is possible for many cells without any special adaptation. For cell lines that do not tolerate such a simple conversion, we recommend culturing the cells initially in *Serum-free multi-purpose Medium* with the addition of serum and gradually reducing the serum content. This procedure is supported by higher titers at seeding or, in case of adherent cells, by switching to the next lower serum concentration only after attachment of the cells.

Important: For a successful transfer of the cells into a serum-free culture, the vitality of the cells plays a crucial role. Therefore, the cells must be collected in the logarithmic growth phase.

For cell lines that require specific growth factors, these should continue to be added in the usual concentration.



Caution: Whenever switching to serum-free media, possible changes in the cells must be taken into account. These may include morphology, karyotype, surface markers, etc. Cells in serum-free medium may therefore not always be identical to those from serum-containing culture from which they were derived (selection).

Adherent cells:

Since the serum-free multi-purpose medium does not contain any attachment factors, some adherent cell types may require pretreatment of the culture vessels with gelatin, collagen, poly-D-Lysine or fibronectin. This should be considered especially for low seeding densities. In the case of adherent cells, it must also be ensured that no negative effects on the cells occur after cell detachment with trypsin. Since the neutralization effect caused by FBS is eliminated, the trypsin must be removed by thorough washing or inactivated by a suitable trypsin inhibitor.

Sensitive cells:

In the case of very sensitive cells, it may be helpful to slowly thin out not only the serum content but also the previously used medium.

For research use only! Not approved for human or animal diagnostic or therapeutic procedures.

Storage

Store at 2 – 8°C. *Serum-free multi-purpose Medium* is stable for at least 10 months from date of production.

Related products

1510	Penicillin/Streptomycin solution in 0.85 % NaCl for cell biology
1453	Gentamycin sulfate for biochemistry
2098	D-PBS (10X) w/o Ca and Mg for cell biology
1429	D-PBS (1X) w/o Ca and Mg (pH 7.4) for cell biology
6085	Hanks' Balanced Salt Solution w/o Ca and Mg, w/o Phenol red, with NaHCO ₃
4673	Earle's Balanced Salt Solution w/o Ca and Mg, with Phenol red and NaHCO ₃
4266	Trypsin inhibitor (1 mg/ml) for cell biology
1444	Trypsin (0.05 %) - EDTA (0.02 %) solution in HBSS w/o Ca and Mg, with Phenol red
1501	Trypsin (0.25 %) - EDTA (0.53 mM) solution in HBSS, w/o Ca and Mg, with Phenol red
2241	Serum-free Medium for HEK-293 cells in suspension
9213	Serum-free Medium for adherent HEK-293 cells with L-Glutamine

