Datasheet

ISF-1

Serum-free Hybridoma Medium

Product	Description	Catalogue-No.	Size
ISF-1	Serum-free medium for the cultivation of Hybridoma cell lines	P04-995968	1000 ml

Product Description

ISF-1 is a serum-free and defined culture medium for *in vitro* cultivation and expansion of hybridoma cell lines. High yield and final concentration of monoclonal Antibodys (mAb) can be achieved.
As this product is free of hydrolysates, and only contains traces of animal-derived components (<0.1 % w/v) and proteins (<0.1 % w/v), it is suitable for the production of mAb in higher scales.

Storage conditions

Storage: 2 – 8 °C in the dark
Stability: 1 year
Size: 1000 ml, other sizes on request

Composition

ISF-1 has been manufactured with stable Glutamine. It also contains a surfactant. Therefore no additional supplement for agitated suspension culture is needed.

Suitability

ISF-1 works well for a variety of hybridoma systems, but will not grow cholesterol dependent cell lines without further supplementation (Addition of a lipoprotein preparation or other source of cholesterol is needed for these cell lines). ISF-1 is compatible with most antibiotics, including Penicillin/Streptomycin, Gentamicin, Puromycin or Fungizone. The use of antibiotics could reduce the yield and productivity of hybridoma cell lines.

Instructions for Use

ISF-1 is a ready to use medium for cultivation of hybridoma cell lines at 37 °C in a humified atmosphere with 5 % CO_2.
To permit gas exchange caps of the cell culture flasks should be loosened or caps with filter vents should be used. This product has been tested in different cell culture system, including stationary culture, spinner, roller bottles and bioreactors.

PAN Biotech GmbH – Am Gewerbepark 6+13 – 94501 Aidenbach – GERMANY
www.pan-biotech.com – phone +49-8543-601630 – fax +49-8543-601649

Adaption to serum free medium

A direct adaption to serum free culture in ISF-1 medium is possible in most cases, but it is also possible to use an indirect adaption sequence.

In both cases the seed cells should be harvested in mid log-phase with high viability. Success of the adaption will depend on the particular cell line and the culture conditions employed. It is recommended maintaining a backup culture in the original medium until successful adaption to ISF-1 is achieved.

Direct adaption:

1. Transfer the cells growing in serum-supplemented medium to prewarmed ISF-1. Seeding density should correspond with normal seeding density of the cell line. Incubate the cells at 37 °C in a humified atmosphere of 5 % CO_2.
2. Subculture the cell line monitoring cell growth and viability for 4 – 8 passages.
3. If the culture fails to maintain acceptable growth and viability over 4 – 8 passages, use the indirect adaption protocol.

Indirect adaption:

1. Inoculate cells at double the normal seeding density in a 3:1 mixture of serum supplemented : serum-free medium.
2. After reaching 10^6 viable cells/ml subculture in a 1:1 mixture of serum supplemented : serum-free medium.
3. After reaching 10^6 viable cells/ml subculture into a 1:3 mixture of serum supplemented : serum-free medium.
4. After reaching 10^6 viable cells/ml subculture into 100 % serum-free medium.

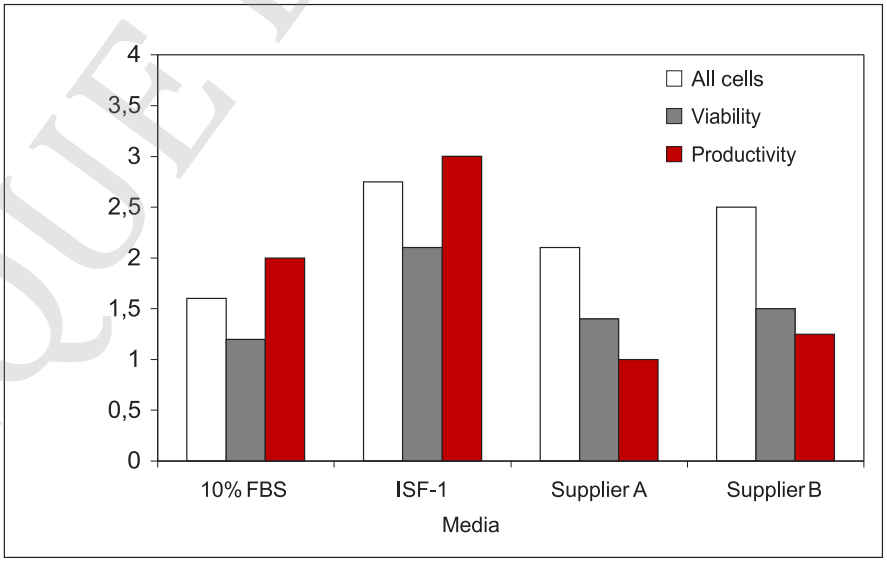

Fig.1: Influence of different media on cell growth, viability and Productivity. Hybridoma cells were cultivated in T-flasks. After adaption of the cells to the different media, cell growth, viability and productivity were measured after one week of cultivation. Productivity is shown in comparison to 10 % FBS-containing medium.

Technical support

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

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