

Technical Data Sheet

Date: 14/09/2015

Foetal Bovine Serum, Lyophilised

Product Codes

LS-381 LS-382 LS-385

Collected from the source:

When researchers choose their serum an important factor that should be taken into consideration is the source, which also emphasises the traceability of the serum.

Our system of vertical integration allows us to be certain of the origins and traceability of our FBS. Each batch is rigorously controlled, from the collection of serum by our own staff (for French sera) and for the importation of the other sera and in all stages of the treatment and production. Lyophilised Sterile Foetal Bovine Serum is derived from clotted whole blood aseptically collected from the foetus via cardiac puncture.

Filtration:

The serum is filtered before dehydration to guarantee the quality of the serum will stay intact during the dehydration process.

Gamma Irradiation:

After dehydration, the serum is gamma irradiated at a dose validated to assure the sterility of the serum and to keep intact the capacity of the serum to promote the cell growth.

Hydration:

The powdered serum can be rehydrated in water or directly in media.

If you need to prepare 500ml of media with 10% of FBS, you can add 3g of instant FBS directly into the 500ml bottle of media. Gently stir the solution (to avoid the production of foam) until total dissolution. Do not heat.

The media with 10% FBS is ready to use.

If you do not need the whole quantity of the instant FBS, you can dilute 3g into 50ml of sterile distilled water. Water temperature should be 15-20°C.

Gently stir the medium (to avoid the production of foam) until total dissolution. Do not heat. Now you have normal serum that can be stored frozen.

Note: It is possible to dilute instant FBS and the powdered media at the same time into water. In this case, do not forget to add Na Bicarbonate and the L-Glutamine (if needed) and adjust the pH before filtering the solution.

Sterility:

Instant FBS is tested for the absence of aerobic and anaerobic bacteria and fungi, yeast and Mycoplasma. The sterility test is based on the European Pharmacopoeia requirements. The sera are tested for the absence of Mycoplasma by culture.

Virus tested:

Instant FBS is tested for:

- Bovine Viral Diarrhoea (BVD)
- Cytopathogenic agents e.g. Infectious Bovine Rhinotracheitis (IBR) / BHV-1
- Hemadsorbing agents e.g. Parainfluenza Type 3 (PI3)



Instant FBS is tested for the absence of the indicated viruses by inoculation to permissive cells. The revelation is made by immunofluorescence for pestiviruses. Cytopathogenic agents and hemadsorbing agents are detected by microscopic observations.

Endotoxin:

Instant FBS is tested to determine the levels of endotoxins. BioSera carries out a chromokinetic quantitative test, according to the method D of the European Pharmacopoeia. The endotoxin reagent is standardized against the US reference endotoxin.

Osmolarity:

Determined by a lowered freezing temperature. The osmometer is calibrated against standard solution.

Haemoglobin:

The haemoglobin level is measured by spectrophotometer.

Cell Culture

Biological performance is assessed using cell culture medium supplemented with the serum being tested. During the test period, cultures are examined microscopically for any morphological abnormalities that may indicate toxic components in the serum.

Cell Culture Tests

Cell Growth, Plating Efficiency, Cloning Efficiency

Cell Lines Tested

- HELA – Cancer Cell/Human
- L929 – Fibroblast mouse/ As macrophage
- SP2/0-AG14 – Mouse Lymphoma
- MRC-5 – Human Lung

Country of Origin

The country in which the serum was taken from the donor/animal. Biosera FBS is sourced from the following Countries

- FB-381 South America
- FB-382 France
- FB-385 Chile

Use

For In Vitro Laboratory use only, not for drug, human or veterinary use.

Storage conditions

Store at 2-8°C and protect from light.
After rehydration, do not store the product more than 24 hours at ambient temperature, store at 2-8°C (do not store more than one month at 4°C.)
The sera rehydrated into water could be frozen but avoid repeated repeated freeze/thaw cycles

Shelf Life

36 months at 2-8°C

Recommended use :

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light
- Store the product in a dry area
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)
- Protect the product from any form of humidity
- Use, in one time, after opening, the entire quantity of product of the container, without making a concentrated solution (to avoid the formation of precipitates). If it is not possible, close the container immediately after sampling the quantity of powder required.

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.