



EUROCLONE FETAL BOVINE SERUM

Quality and Processes



Euroclone Foetal Bovine Sera are characterized by high quality, sterility and homogeneity.

The quality of our sera is checked at each step of the production process.

The raw material is collected in closed sterile bags to avoid bacterial contamination and high level of endotoxins.

Each lot is tested for the absence of bacteria, fungi, yeast, mycoplasma, and delivered with a Certificate of Analysis.

Sera Origin

The high quality of FBS is not related to its country of origin but rather depends on how it is collected, processed and tested.

The raw material is collected from EU (European Union) and USDA (United States Department of Agriculture) approved countries.

High quality FBS can come from any of the USDA and EU approved countries; both regulations require that all FBS, regardless of country origin, have to be tested to assess viruses' absence.



Regulations

USDA approved FBS is produced from blood collected in countries that have been approved for exporting beef products into the United States.

These restrictions are imposed, not for the quality of FBS but mainly because of the animal health status in the exporting country.

Among these countries we find: Australia, Canada, Chile, Costa Rica, Honduras, Iceland, Japan, Mexico, New Zealand, Nicaragua, and Uruguay.

EU approved FBS is produced from blood collected in countries that have been approved for exporting beef products into European Union according to the Commission Regulations 1609/2009/EC e 142/2011/EC. Currently this includes Central and South America, USA, Canada, Australia; New Zealand and South Africa.



In this mini guide we divide the products according to their country of origin, approved by USDA and by EU regulations.

SERA EU APPROVED

Description	100ml	500ml
FBS South America origin EU Approved	ECS0180D	ECS0180L
Dialyzed EU Approved FBS South America	ECS0181D	ECS0181L
Tetracycline Negative FBS South America origin	ECS0182D	ECS0182L
OptiClone Serum South America origin	ECS0183D	ECS0183L
ULTRA Low Endotoxin FBS,EU Approved, Origin: South America	ECS0186D	ECS0186L
Euromed ES-FBS South America origin	ECS0196D	ECS0196L
FBS South Africa origin EU Approved	ECS0189D	ECS0189L

SERA USDA APPROVED

Description	100ml	500ml
FBS Mexico origin USDA Approved	ECS0120D	ECS0120L
FBS Central America Origin USDA Approved	ECS0160D	ECS0160L
FBS Australia origin	ECS0170D	ECS0170L
FBS Chile Origin USDA Approved	ECS0188D	ECS0188L
FBS U.S. origin	ECS1102D	ECS1102L

HEAT INACTIVATED SERA

This treatment (**Heat Inactivation for 56°C at 30min**) allows destroying the complement acting in the immune system, to avoid an interference with some experimentation, in particular immunology tests. It allows also to inactivate viruses and to destroy some bacterial contaminants such as the mycoplasma

EU APPROVED

Description	100ml	500ml
FBS South America origin EU Approved Heat Inactivated	ECS0180DH	ECS0180LH
Newborn Calf Serum heat inactivated	ECS0070DH	ECS0070LH
Goat Serum Heat Inactivated	ECS0200DH	ECS0200LH

USDA APPROVED

Description	100ml	500ml
FBS Australia origin Heat Inactivated	ECS0170DH	ECS0170LH
FBS Mexico origin USDA Approved Heat Inactivated	ECS0120DH	ECS0120LH
FBS U.S. origin	ECS1102DH	ECS1102LH

GAMMA IRRADIATED SERA

The gamma irradiation at 25-35 kGy minimizes the risk associated with the use of animal products. This treatment reduces or eliminates virus and bacteria. The use of Gamma irradiated FBS is suggested for virus and vaccine production, and during the manufacture of diagnostic products.

EU APPROVED

Description	100ml	500ml
FBS South America origin EU Approved Gamma Irradiated	ECS0180DI	ECS0180LI
ULTRA Low Endotoxin FBS,EU Approved, Origin: South America Gamma Irradiated	ECS0186DI	ECS0186LI

USDA APPROVED

Description	100ml	500ml
FBS Australia origin Gamma Irradiated	ECS0170DI	ECS0170LI
FBS Central America Origin USDA Approved Gamma Irradiated	ECS0160DI	ECS0160LI
FBS Chile Origin USDA Approved Gamma Irradiated	ECS0188DI	ECS0188LI
FBS Mexico origin USDA Approved Gamma Irradiated	ECS0120DI	ECS0120LI

SERA FROM OTHER SPECIES, EU APPROVED

Description	100ml	500ml
Bovine Serum France origin 0,2 uM	ECS0020D	ECS0020L
Calf Serum France o Canada	ECS0040D	ECS0040L
Chicken Serum	ECS0050D	ECS0050L
Donkey Serum	ECS0217D	ECS0217L
Donor Horse Serum	ECS0090D	ECS0090L
Goat Serum	ECS0200D	ECS0200L
Horse Serum	ECS0091D	ECS0091L
Human Serum - Type AB male. HIV, HBsAg and HCV tested	ECS0219D	
Lamb Serum - France	ECS0230D	ECS0230L
Newborn Calf Serum	ECS0070D	ECS0070L
Porcine Serum	ECS0240D	ECS0240L
Rabbit Serum	ECS0250D	ECS0250L

Technical TIPS:

Thaw serum

Remove the serum from frozen storage and place it overnight in a refrigerator at 2°C to 6°C. Transfer the bottles to a 37°C water bath. Swirl the bottles from time to time in order to mix the solutes that tend to concentrate at the bottom of the bottle.

Do not keep the serum at 37°C any longer than necessary to completely thaw it. Thawing serum in a bath above 40°C without mixing may lead to the formation of a precipitate inside the bottle. We don't recommend thawing the serum at high temperature.

Deposits in the serum

The procedures used to prepare serum may retain some fibrinogen. Since external factors may initiate the conversion of fibrinogen to fibrin, flocculent material or turbidity may be observed after thawing or heat inactivation. Testing of serum after this has happened indicates that it does not alter its ability to function as a supplement for cell culture media; It is recommended to use the serum without treatment (filtration or centrifugation); but if the presence of flocculent material or turbidity is a concern, it can be removed by filtration through a 0.45 µm filter. A precipitate can form in serum that is incubated at 37°C for prolonged periods of time. Electron microscopy and X-ray microanalysis indicate that the precipitate may include crystals of calcium phosphate. The formation of a calcium phosphate precipitate does not alter the performance of the serum as a supplement for cell culture.

Our Catalogs in Cell Biology field



EuroClone®
serving science through innovation

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Quality Management Systems and Environmental certified according to EN ISO 9001, EN ISO 13485 and EN ISO 14001