

Specification Sheet

F2442 Sigma-Aldrich

Fetal Bovine Serum

USA origin, sterile-filtered, suitable for cell culture, suitable for hybridoma

Synonym: FBS, FCS, sera, serum

- MDL number [MFCD00132239](#)
- eCI@ss 32160409
- NACRES NA.71



SKU-Pack Size	Availability	Pack Size	Price (SGD)	Quantity
F2442-50ML	Estimated to ship on 04.05.2021 - FROM	50 mL		<input type="text" value="0"/>
F2442-100ML	Available to ship on 14.04.2021 - FROM	100 mL		<input type="text" value="0"/>
F2442-500ML	Estimated to ship on 05.05.2021 - FROM	500 mL		<input type="text" value="0"/>
F2442-6X500ML	Estimated to ship on 04.05.2021 - FROM	6 x 500 mL		<input type="text" value="0"/>
F2442-24X500ML	Estimated to ship on 04.05.2021 - FROM	24 x 500 mL		<input type="text" value="0"/>



Properties

Related Categories [Apoptosis and Cell Cycle](#), [Cell Biology](#), [Cell Culture](#), [Cell Signaling and Neuroscience](#), [Core Bioreagents](#),

Quality Level [500](#)

biological source **bovine fetus**

sterility **sterile-filtered**

composition **Bovine IgG, ≤1 mg/mL**

Hemoglobin, ≤20 mg/dL

origin **USA origin**

application(s) **cell culture | hybridoma: suitable**

cell culture | mammalian: suitable

impurities **≤10 EU/mL endotoxin**

shipped in **dry ice**

storage temp. **-20°C**

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Description

General description

Fetal Bovine Serum (FBS) is a complex mixture with low and high molecular weight biomolecules exhibiting optimal growth-enhancing and growth-suppressing functions. FBS contains molecules, such as growth factors, proteins, vitamins, trace elements, hormones etc. These molecules are important for the growth and maintenance of cells. It is a common supplement for cell culture media.^{[2][3]} FBS is derived from the calf blood. It is devoid of fibrin and clotting factors. Heat inactivation of FBS blocks the complement system.^[6] FBS derived from clotted blood is the most widely used undefined supplement in eukaryotic, especially mammalian, cell culture.^{[1][5]} It is typically used with the classical media that were developed in the 1950s and 1960s. These include many popular media such as Minimum Essential Medium



(MEM), Dulbecco's Modified Eagles Media (DME, DMEM); Iscove's Modified Eagles Medium (IMDM), M199 and Roswell Park Memorial Institute medium, RPMI-1640.

Application

Fetal Bovine Serum has also been used as a component of:

- perivascular-resident macrophage-like melanocytes (PVM/M) growth medium
- synthetic oviduct fluid (SOF)
- Eagle's minimum essential medium (EMEM)
- neurobasal medium
- Hyclone McCoys 5 A medium
- Hanks medium

Biochem/physiol Actions

FBS remains a popular media supplement because it provides a wide array of functions in cell culture. FBS delivers nutrients, growth and attachment factors and protects cells from oxidative damage and apoptosis by mechanisms that are difficult to reproduce in serum-free media (SFM) systems.

Linkage

[Request a serum sample](#)

Analysis Note

- Endotoxin and hemoglobin tested
- Tested for the presence of bacteria, virus, and mycoplasma
- Triple filtered with 0.1 micron membrane under aseptic conditions

Other Notes

Tested for the presence of bacteria, virus, mycoplasma, endotoxin and for hemoglobin content. Triple filtered with 0.1 micron membrane under aseptic conditions.

