



## NuSera™

### Serum Replacement Solution

**Product Code: TCL280**

#### Product Description:

NuSera™ is a Serum Replacement Solution designed to replace fetal bovine serum in cell culture. These media supplements provide a consistent growth environment for a large variety of cell types. By supplying all essential components to satisfy the broadest range of requirements in most cell culture situations. This serum replacement solution exhibits excellent results in culturing of anchorage dependent and suspension cultures.

#### Features

- Low protein content: facilitates the downstream processing
- Low risk of viral, mycoplasma and endotoxin contamination.
- Lot to lot consistency
- Compatible with all the basic cell culture media
- Free of biological variability

#### Directions:

##### Thawing of NuSera™

1. Thawing of NuSera™ should be done as quickly as possible in order to minimize the time
2. Remove the bottle from the freezer and allow them to acclimatize at room temperature for 10 minutes and keep in 2-8° C overnight in refrigerator.

*Note: Do not place the NuSera™ in water bath or incubator. Avoid exposing NuSera™ to elevated temperature as this can lead to degradation of heat labile nutrients.*

##### Usage of NuSera™

1. 10% of NuSera™ is equivalent to 10% fetal bovine serum in basal medium.
2. Aseptically add NuSera™ to the culture media in same quantity as FBS.  
*Note: The concentration of this serum replacement solution can be adjusted for specific cell types or applications to achieve optimal results.*
3. NuSera™ can be stored and used in same manner as fetal bovine serum.

#### Quality Control:

##### Physical and Chemical analysis:

Appearance	: Amber colored solution
pH	: 6.80 - 8.20
Osmolality	: 280.00 - 370.00 mOsm/Kg H <sub>2</sub> O
Endotoxin	: NMT 10 EU/ml
Identity	: Typical

##### Protein content:

Total protein	:	2.1	g/dl
Albumin	:	Value	g/dl
α-Globulin	:	Value	g/dl
β-Globulin	:	Value	g/dl
γ-Globulin	:	Value	g/dl
IgG	:	Value	g/dl

##### Sterility testing:

Aerobic bacteria	:	Not detected
Anaerobic bacteria	:	Not detected
Fungi	:	Not detected
Mycoplasma	:	Not detected

##### Virus testing:

Bovine Virus Diarrhea Virus (BVD-V)	:	Not detected
Bovine Herpes Virus 1 (BHV-1)	:	Not detected
Parainfluenza Type 3 (PI-3)	:	Not detected

**Growth promotion and cytotoxicity:**

Each lot of NuSera™ is tested for growth promotion and cytotoxicity. Growth promotion ability of TCL280 is assessed by supplementing medium with 10% and analyzed qualitatively for morphology and quantitatively by estimating cell counts.

**Storage and Shelf life:**

Store at -10°C to -40°C away from bright light. Shelf life of the product is 48 months. Thawed NuSera™ can be stored at 2-8°C up to four weeks.

Multiple freeze thaw cycles should be avoided. NuSera™ should never be stored in frost free freezers. Frost free appliance undergoes intermittent warming cycle to prevent ice deposit and this might lead to multiple thawing of NuSera™. To avoid multiple freeze thaw cycles or long period of refrigeration, we recommend freezing small aliquots which can be thawed and used as required.

Use before expiry date given on the label.

**Disclaimer:**

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