

## Serum Replacement Supplement animal-free & defined

### Serum Replacement Supplement animal-free & defined

#### Product Description:

Serum Replacement Supplement animal-free & defined is a protein free and chemically defined solution for working in a standardized and defined environment useable in all cell line cultivation as well as in primary cell culture. It can be added to a basal medium that fits the basic needs of the used cells. We recommend a smooth transition to serumfree conditions and to avoid all inadequate or inappropriate efforts.

As direct exposition to serum free conditions can work, but also can cause problems, it would be ideally, to carry out the transition to serum-free conditions over several media changes and passages to gradually select cells that can grow under serum-free conditions.

Please be aware that the Serum Replacement Supplement does not contain any growth factors like cytokines, hormones like insulin etc.

In some cases to generate higher proliferation rates you have to add a growth factor / hormone cocktail.

**Ask us for support.**

#### Product Specification:

Serum Replacement Supplement animal-free & defined contains:	all necessary additional compounds for good cell proliferation
Vol.:	100 ml
Storage:	4°C
Shelf live:	10 Months



Never freeze the Serum Replacement Supplement animal-free & defined.

**For research use only. Not for use in therapy or diagnostics.**

#### Sterility Testing:

This product has been tested for 14 days after incubation in a 37°C incubator. It is free of bacterial and fungal contamination. Product has shown to be negative with respect to mycoplasma contamination by Real-Time PCR.

#### Product Information

Catalogue number:	PB-SX-000-0079-34-100
Product:	Serum Replacement Supplement animal-free & defined
Size:	100 ml

***How to change from serum containing culture to serum free conditions:***

Add 50 ml Serum Replacement Supplement animal-free & defined to 500 ml basal medium. The basal medium should contain L-Glutamin [minimum 0,5 mM]. This amount replaces 50 ml serum.



As some compounds like antibiotics often bind to plasma proteins which reduces their activity, there are no such proteins in our serum replacement supplement and therefore please handle adding antibiotics with care, not to cause deleterious impacts on cell growth.

If you want to work with attached cells please coat your culture vessel before use with an appropriate extra cellular matrix and seed the cells with 10.000 up to 20000 cells per cm<sup>2</sup>.

**GENERAL ADAPTION METHODS TO SERUM-FREE CONDITIONS:**

**1. Direct Adaptation**

Which is carried out by a direct transfer of the cells from the serum-containing medium into the serumfree medium.

**2. Sequential Adaptation or Weaning Method**

Transfer the cells from the serum-containing medium into a mixture of serum containing medium with serumfree medium. Each step halves the serum-supplemented media, thus increasing the serum-free media to approximately below values:

- a. 50% Serum Replacement -supplemented medium / 50% Serum-supplemented medium
- b. 75% Serum Replacement -supplemented medium / 25% Serum-supplemented medium.
- c. 87,5% Serum Replacement -supplemented medium / 12,5% Serum-supplemented medium
- d. 93,75% Serum Replacement -supplemented medium / 6,25% Serum-supplemented medium
- e. 100% Serum Replacement -supplemented medium

If the cells during the adaption process stop growing go one step back until the cell growth is continued.



**Protein Production**

With attached CHO cells we recognized that it was an advantage not to change old medium completely but only 70%, e.g. the flask needs 10 ml medium replace only 7 ml with fresh medium per medium change.

Please take into account the specific requirements of the cell type in order to guarantee the best chances of success for the switch to defined conditions.

**ORDER UNDER [sales@pelobiotech.com](mailto:sales@pelobiotech.com) or FAX + 49 (0)89 517 286 59 88**