

Why do cell cultures need serum?

The short answer is that it both nourishes and protects the cells in a way that almost nothing else has been found to do. Bovine serum stimulates the cells to grow and multiply and helps to keep the cells normal and healthy over time.

The largest proportion of bovine serum used to support the growth of cells in cell culture is fetal bovine serum. It fulfils the function especially well because it contains particularly high levels of substances that promote cell growth. It also has favorably low levels of certain other molecules, including immunoglobulins, which are found in the blood of older animals and may interfere with production processes.

It is the incredible complexity of its molecular make up that makes serum unique – and so valuable.