

# Peace of mind

begins with

# FreeAdd

Chemically defined substitute for serum

www.biowest.net

**Batch to Batch consistency**

**Production under cGMP**

**Animal Free**

**Albumin Free**

**Growth factors Free**

**Reduced costs of upstream  
& downstream processing**

**biowest**  
The Serum Specialist

# Peace of mind begins with **FreeAdd** Chemically defined substitute for serum

FreeAdd is a chemically defined substitute for animal serum. It provides the necessary nutritional support for cell growth, development and expression.

FreeAdd comes with

## Features :

- Chemically Defined
- Free from Animal and Human Component
- Free from Growth Factors
- Free from Non-defined component like Hydrolysates
- Free from Virus and TSE/BSE
- Ultra Low (Recombinant) Protein Content
- Applicable for most cell lines, stem cells, primary cells and insect cells
- Sterile-Produced
- Equal or Better Culture Performance

## Benefits :

- Prevention from Potential Risk of Virus Contamination
- Reduction of Up and Down-Stream Processing Costs
- Elimination of Variation of Batches
- Traceability
- Production under cGMP
- Reliability of Supply
- Flexibility of Packaging
- Availability of Certifications

Biowest FreeAdd truly provides you with Peace Of Mind. Please consult our Application Notes for specific requirements of the main cell types.

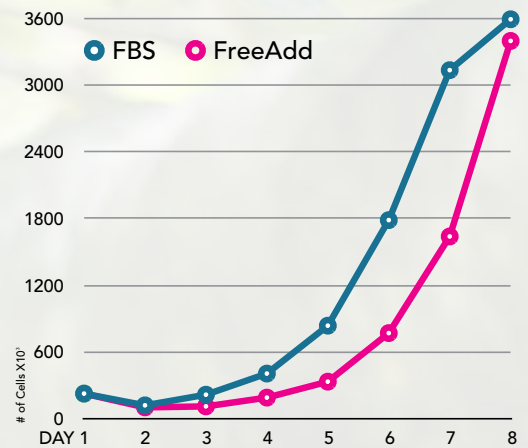


**biowest**  
The Serum Specialist

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## Growth Curve

NIH/3T3 - mouse fibroblasts



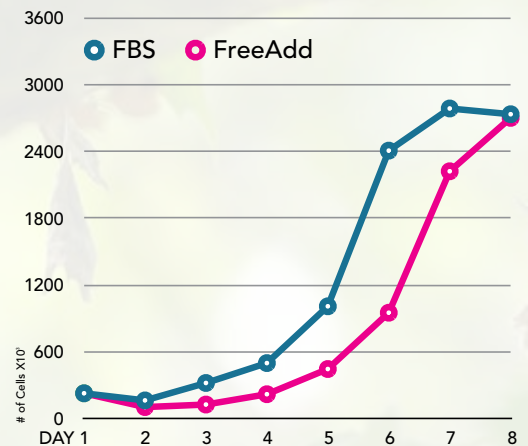
### Growth curve of NIH/3T3 mouse fibroblasts in 2% FreeAdd vs 10% FBS.

NIH/3T3 mouse fibroblasts were grown in medium supplemented with 10% FBS until the start of the experiment and were seeded in medium supplemented with 2% of FreeAdd without FBS and without any transition period. The seeding densities were the same for the FBS control groups and the FreeAdd groups.

- seeding density 8,000 cells/cm<sup>2</sup>
- basal medium DMEM, high glucose
- medium was changed partially (75%) every 48 hours

## Growth Curve

CHO-K1 - Chinese hamster ovary cell line



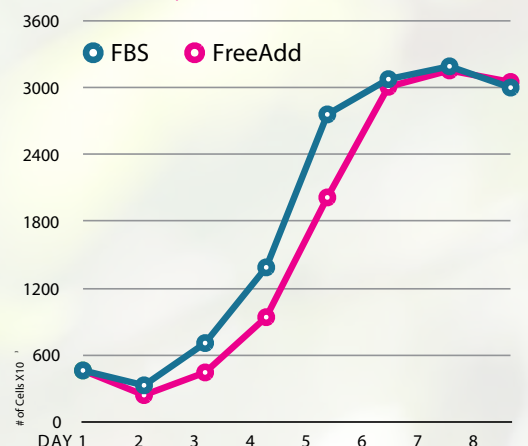
### Growth curve of CHO-K1 Chinese hamster ovary cell line in 2% FreeAdd vs 10% FBS

CHO-K1 Chinese hamster ovary cell line were grown in medium supplemented with 10% FBS until the start of the experiment and were seeded in medium supplemented with 2% of FreeAdd without FBS and without any transition period. The seeding densities were the same for the FBS control groups and the FreeAdd groups.

- seeding density 10,000 cells/cm<sup>2</sup>
- basal medium Kaighn's Modification of Ham's F-12Medium, with thymidine and hypoxanthine.
- medium was changed partially (75%) every 48 hours.

## Growth Curve

RLEC - rat liver epithelial cell line



### Growth curve of RLEC rat liver epithelial cell line in 2% FreeAdd vs 10% FBS.

RLEC rat liver epithelial cell line were grown in medium supplemented with 10% FBS until the start of the experiment and were seeded in medium supplemented with 2% of FreeAdd without FBS and without any transition period. The seeding densities were the same for the FBS control groups and the FreeAdd groups.

- seeding density 20,000 cells/cm<sup>2</sup>
- basal medium Nutrient Mixture F-12
- medium was changed partially (75%) every 48 hours