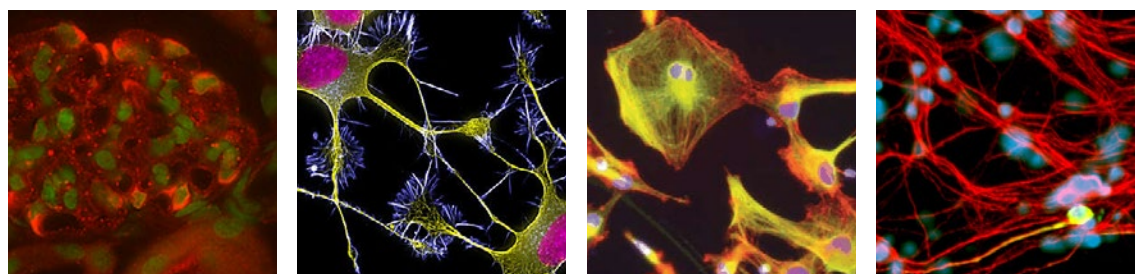


# Corning® Cytokines, Growth Factors, and Media Supplements

CORNING

Further Defining Cell Culture Media with Growth Factors and Cell Supplements



The Corning portfolio of cytokines, growth factors, and media supplementation offers a wide array of proteins that result in proliferation or differentiation of the affected cells.

- ▶ Vialled, highly purified growth factors with high biological activity
- ▶ Broad range of highly purified natural and recombinant lymphokines
- ▶ Enriched culture supplements to be reconstituted/added in the medium of your choice
- ▶ Proteins that allow you to propagate your cells under defined serum-reduced or serum-free conditions

Cytokines are a class of signaling molecules or intercellular mediators (proteins, peptides, and glycoproteins) that primarily affect cells of the immune system. However, they can affect various cell types outside of the immune system. Unlike classical hormones, cytokines are produced by a number of tissue or cell types rather than by specialized glands. The effects of cytokines on cells can yield different outcomes, including cell proliferation, chemotaxis, and cell death. Cytokines and growth factors are similar in their structure and mechanism of action. Both bind and initiate signaling pathways, and many share several intracellular signaling components.

Growth factors are proteins that bind to receptors found on the surface of non-hematopoietic cells. Each family of growth factors affect specific cell types (i.e., nerve growth factors (NGFs) affect neuronal cell types, and epidermal growth factors (EGFs) affect epithelial cell types).

These products enable researchers to optimize their media for serum-reduced or serum-free growth. Selecting the appropriate growth factors and cytokines for your application will be based on existing protocols, experience, or experimentation. The mechanism of action of growth factors has been and continues to be extensively studied. Some cell lines depend on certain supplementation – whether that be a general growth supplement or a specific growth factor – to differentiate or proliferate.

## Corning Cytokines

Corning offers a range of cytokines and glycoproteins that are derived from different species. These cytokines have been used to promote long-term proliferation in cell culture and to induce cell-mediated immune responses in a variety of cell types.



Cat. No.	Description	Size	Qty/Cs
354043	Interleukin-2 (IL-2), human recombinant	10,000 BRMP units	1
356043	Interleukin-2 (IL-2), human recombinant	50,000 BRMP units	1
354040	IL-3 culture supplement, mouse	25 mL	1
354068	Interleukin-4 (IL-4), human recombinant	5 µg	1
356066	Tumor Necrosis Factor-α (TNF-α), human recombinant, 50 µg (10 µg/container)	10 µg	5

## Corning® Growth Factors

Corning offers a range of growth factors that are derived from different species, both natural and recombinant. These growth factors have been used to promote long-term proliferation in cell culture and to induce cell differentiation in a variety of cell types under serum-free or reduced serum conditions.



Cat. No.	Description	Size	Qty/Cs
356005	2.5S Nerve Growth Factor (NGF), mouse natural, 1 mg (500 µg/container)	500 µg	2
354009	7S Nerve Growth Factors (NGF), mouse natural	100 µg	1
354060	Basic Fibroblast Growth Factors (bFGF), human recombinant	10 µg	1
356060	Basic Fibroblast Growth Factors (bFGF), human recombinant, 50 µg (5 µg/container)	5 µg	10
356061	Basic Fibroblast Growth Factors (bFGF), human recombinant, 100 µg (10 µg/container)	10 µg	10
354052	Epidermal Growth Factor (EGF), human recombinant	100 µg	1
356052	Epidermal Growth Factor (EGF), human recombinant, 1 mg (100 µg/container)	100 µg	10
354001	Epidermal Growth Factor (EGF), mouse natural (culture grade)	100 µg	1
356001	Epidermal Growth Factor (EGF), mouse natural (culture grade), 1 mg (100 µg/container)	100 µg	10
354010	Epidermal Growth Factor (EGF), mouse natural (receptor grade)	100 µg	1
356010	Epidermal Growth Factor (EGF), mouse natural (receptor grade), 500 µg (100 µg/container)	100 µg	5
356051	Platelet-derived Growth Factor-BB (PDGF-BB), human recombinant, 100 µg (10 µg/container)	10 µg	10
354039	Transforming Growth Factor-β (TGF-β), human natural	1 µg	1
356039	Transforming Growth Factor-β (TGF-β), human natural, 5 µg (1 µg/container)	1 µg	5
356040	Transforming Growth Factor-β (TGF-β), human natural, 10 µg (2 µg/container)	2 µg	5
354107	Vascular Endothelial Growth Factor (VEGF), human recombinant	10 µg	1

## Corning Media Growth Supplements

Corning offers a broad range of media growth supplements. Some products are specific to cell type, such as SMC4 (for iPSCs) and T-Cell culture supplement (for T-cells), while other products promote proliferation in a wide variety of cell types. ITS and Corning Nu-Serum™ can be used to establish growth environments containing reduced levels of serum.



Cat. No.	Description	Size	Qty/Cs
354331	Albumin (BSA, delipidized), bovine serum	10 g	1
354123	Bovine pituitary extract (BPE)	15 mg	1
356123	Bovine pituitary extract (BPE), 75 mg (15 mg/container)	15 mg	5
354006	Endothelial cell growth supplement (ECGS)	15 mg	1
356006	Endothelial cell growth supplement (ECGS)	100 mg	1
354351	ITS premix universal culture supplement	5 mL	1
354350	ITS premix universal culture supplement	20 mL	1
354352	ITS+ premix universal culture supplement	20 mL	1
355006	MITO+ serum extender	5 mL	1
355100	Corning Nu-Serum growth medium supplement	100 mL	1
355500	Corning Nu-Serum growth medium supplement	500 mL	1
355104	Corning Nu-Serum IV growth medium supplement	100 mL	1
355504	Corning Nu-Serum IV growth medium supplement	500 mL	1
354115	T-cell culture supplement with ConA (IL-2 culture supplement), rat	100 mL	1

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