

Products for Neuronal Cell Culture

P R O D U C T N E W S

Invitrogen, under the GIBCO™ brand name, offers an ever-expanding array of media, supplements and growth factors to advance neuroscience research.

Neurobasal™ Media

Neurobasal™ Media are basal media formulated to meet the neuronal cell's special requirements. When supplemented with B27, they allow for long-term maintenance of the normal phenotype and growth of neuronal cells, and maintain pure populations of neuronal cells without the need of an astrocyte feeder layer.

- Neurobasal™ Medium is for long-term growth of fetal hippocampal neurons and many other neurons of the CNS.
- Neurobasal™-A Medium is for long-term growth and viability of rat postnatal and adult hippocampal and cortical neurons of the CNS.
- New formulations without Phenol Red are now available.

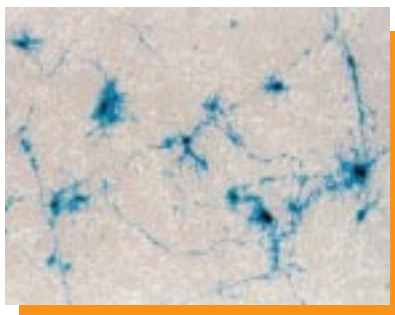


Figure 1. Primary rat cortical neurons, E18, were plated in GIBCO™ Neurobasal™ Medium at 2×10^5 cells/well in 24-well plates. Cells were transfected 4 days later using 0.8 μ g of pCMV-SPORTb-gal DNA, purified using Concert™ High Purity Plasmid Purification System, and 4 μ l of LipofectAMINE™ 2000 Reagent.

B-27 Supplement

An optimized serum substitute developed for low-density plating and long-term viability and growth of hippocampal and other CNS neurons. When added to Neurobasal™ Media, B-27 supports the growth of neuronal cells without an astrocyte feeder layer and is effective for the growth of neuronal tumor cell lines.

B-27 Supplement Minus AO

Antioxidants have been removed from B-27, making it ideal in studies of oxidative damage and rescue, apoptosis, or age-related neurodegenerative diseases where free radical damage to neurons occur.

B-27 Supplement Without Vitamin A (Retinoic Acid)

The newest B-27 formulation can be used for the growth of CNS progenitor or stem cells when combined with D-MEM/F12, Neurobasal™ or E-MEM and β -FGF.

N-2 Supplement

A chemically defined additive for Neurobasal™ Media for growth of rat primary embryonic neurons and embryonic CNS progenitor cells.

G-5 Supplement

A chemically defined additive for the growth of glial cells, also supports growth of primary and serial tumor lines of the astrocytic phenotype when added to D-MEM, D-MEM/F12, E-MEM, or other basal formulations.

Neurotrophins and Other Growth Factors

- BDNF—human, recombinant Brain-Derived Neurotrophic Factor
- GDNF—human, recombinant Glial-Derived Neurotrophic Factor
- β -FGF—human, recombinant Basic Fibroblast Growth Factor
- NGF 2.5S and 7S—murine Nerve Growth Factors
- IGF-I—Insulin-like Growth Factor I
- α -FGF—Acidic Fibroblast Growth Factor
- PDGF BB—Platelet-Derived Growth Factors

Ordering Information

Product	Cat. No.	Size
Neurobasal™ Medium (1X)	21103-049	500 ml
New Neurobasal™ Medium (1X) without Phenol Red	12348-017	500 ml
Neurobasal™ -A Medium (1X)	10888-022	500 ml
New Neurobasal™ -A Medium (1X) without Phenol Red	12349-015	500 ml
B-27 Supplement (50X)	17504-044	10 ml
B-27 Supplement Minus AO (50X)	10889-038	10 ml
B-27 Supplement w/o Vitamin A (50X)	0980153SA	10 ml
N-2 Supplement (100X)	17502-048	5 ml
G-5 Supplement (100X)	17503-012	1 ml
Brain-Derived Neurotrophic Factor, Human, Recombinant	10908-010	5 µg
Glial-Derived Neurotrophic Factor, Human, Recombinant	10907-012	5 µg
Basic Fibroblast Growth Factor (β-FGF), Human, Recombinant	13256-029	10 µg
Nerve Growth Factor 2.5S (NGF 2.5S), Murine, Natural	13257-019	10 µg
Nerve Growth Factor 7S (NGF 7S), Murine, Natural	13290-010	100 µg
Insulin-Like Growth Factor-I (IGF-I), Human, Recombinant	13245-063	10 µg
Acidic Fibroblast Growth Factor (α-FGF), Human, Recombinant	13241-013	10 µg
Platelet-Derived Growth Factor BB (PDGF BB), Human, Recombinant	13244-033	5 µg
GlutaMax™-1 Supplement	35050-061	100 ml
Customized Neuronal Cell Media	•	•
LipofectAMINE™ 2000	11668-019 11668-027	1.5 ml 0.75 ml
SuperScript™ cDNA Libraries		
Human Brain	10418-010	1.4 kb
Human Fetal Brain	10662-013	1.7 kb
Mouse Brain	10655-025	1.9 kb
Rat Brain	10653-012	1.5 kb
Systems for Molecular Biology		
SFV Gene Expression System pSFV Eukaryotic Expression Vector	18448-019	10 µg
SFV Gene Expression System pSFV-Helper2 DNA	10180-016	10 µg
Extra-Cellular Matrix Reagents		
Fibronectin (Human)	33016-023 33016-015	1 mg 5 mg
Fibronectin (Murine)	12173-019	1 mg
Laminin (Human)	12163-010	100 µg
Laminin (Murine)	23017-015	1 mg
Myelin Basic Protein	13228-010	10 mg

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These products are for research use, and where appropriate, as raw material components in further cell culture manufacturing applications.

They are not intended for human or animal diagnostic, therapeutic, or other clinical uses, unless otherwise stated.

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