



Product Description

Fibroblast Basal Medium (NBPF-03) is a sterile, liquid cell culture medium formulated for the *in vitro* maintenance and expansion of primary fibroblasts. It is optimized to support the growth of dermal, lung, cardiac, and other fibroblast cell types when supplemented with appropriate growth factors, serum, and additional components (e.g., Fibroblast Growth Supplement Kit, sold separately). The basal medium provides essential nutrients, inorganic salts, vitamins, amino acids, and a buffering system, but contains **no serum, growth factors, or antibiotics.**

This medium is designed for use with human and animal fibroblasts, including but not limited to human dermal fibroblasts (HDF), human lung fibroblasts (HLF), and human gingival fibroblasts (HGF).

Product Specifications

Parameter	Specification
Catalog Number	NBPF-03
Form	Liquid, sterile
Volume	500 mL
pH	7.2 – 7.4 (at 25°C)
Osmolality	280 – 320 mOsm/kg



Parameter	Specification
Endotoxin Level	≤ 0.1 EU/mL
Sterility	Negative for bacteria, fungi, and mycoplasma
Storage	2 – 8 °C, protected from light
Shelf Life	12 months from date of manufacture when stored as directed

Storage and Handling

- Store at **2–8 °C** in the dark. **Do not freeze**, as freezing may cause precipitation or loss of activity.
- Protect from light to prevent degradation of light-sensitive components (e.g., vitamins).
- If any precipitate is observed before use, gently warm the bottle to 37 °C and mix thoroughly. Do not use if turbidity or contamination is evident.
- Use aseptic technique when dispensing to maintain sterility.

Instructions for Use

Cell Culture

1. Pre-warm complete medium to 37 °C before adding to cells.
2. Culture fibroblasts in a humidified incubator at 37 °C with 5% CO₂.
3. Replace medium every 2–3 days.
4. Passage cells when 80–90% confluent using standard trypsin/EDTA dissociation.



Quality Control

Each lot of Fibroblast Growth Medium is tested to ensure consistent performance:

- **Sterility:** Passes 14-day sterility test per USP <71> (bacteria and fungi).
- **Mycoplasma:** Negative by PCR or culture.
- **Endotoxin:** <0.1 EU/mL by LAL assay.
- **Performance:** Supports at least 5 population doublings of human dermal fibroblasts (when supplemented with 5% FBS and 1× fibroblast growth supplement) with ≥ 90% viability and characteristic spindle-shaped morphology.

A Certificate of Analysis (CoA) is available upon request for each lot.

Applications

- Expansion of primary and immortalized fibroblasts
- Wound healing and scar formation studies
- Fibrosis and extracellular matrix research
- Co-culture systems with epithelial or endothelial cells
- Drug screening and toxicology
- Skin biology and tissue engineering

Safety and Precautions

- **For Research Use Only.** Not intended for human or animal therapeutic, diagnostic, or clinical use.
- Handle with standard laboratory safety practices. Use appropriate personal protective equipment (gloves, lab coat, eye protection).
- Dispose of all waste according to local regulations.



Related Products

Product	Catalog Number
Fibroblast Growth Supplement Kit	NBPF-GS-01
Fibroblast Attachment Factor	NBPF-AF-02
Trypsin/EDTA Solution (0.05%)	NBP-TE-03
Trypsin Neutralization Solution	NBP-TN-01
HDF, Cryopreserved	NBPF-C-HDF

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