

Recombinant Human FGF2 / Fibroblast Growth Factor 2 (FGF-basic) (154 a.a.), Animal Free & Carrier Free

Cat #: C-CYP299

Size: 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

FGF2, also known as a basic fibroblast growth factor (bFGF) and FGF-β, is a growth factor and signaling protein encoded by the FGF2 gene. FGF2 has been shown in preliminary animal studies to protect the heart from injury associated with a heart attack, reducing tissue death and promoting improved function after reperfusion. FGF2 (bFGF) are also involved in a variety of biological processes, including embryonic development, morphogenesis, tissue repair, tumor growth, and invasion. Additionally, FGF2 (bFGF) is frequently used for a critical component of cell culture medium, e.g., human embryonic stem cell culture medium, serum-free culture systems.

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Measure by its ability to induce 3T3 cells proliferation. The ED₅₀ for this effect is <1 ng/mL. The specific activity of recombinant human FGF2 is approximately >5 x 10⁵ IU/mg.

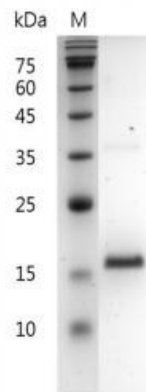
Endotoxin: <0.1 EU per 1 µg of the protein by the LAL method.

Amino acid sequence:

AAGSITTLPALPEDGGSGAFPPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSDPHIKLQLQAEERGVSISIKVCANRYLAMKEDGRLL

ASKCVTDECEFFERLESNNYNTYRSRKYTSWYVALKRTGQYKLGSKTGPQKAILFLPMSAKS with polyhistidine tag at the N-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, containing 0.01% Sarkosyl, pH 7.4.



SDS-PAGE analysis of recombinant human FGF2

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.