Recombinant Human FGF2 Protein

Cat. No. FGF2-10H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human FGF-2 (bFGF) 154 aa protein without tag was expressed in E. coli. Animal-free (ADCF) and carrier protein-free. Mass spectrometry: single species with expected mass. Recovery from stock vial: >95%
Species	Human
Source	E.coli
ProteinLength	154 aa
Description	The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. This protein has been implicated in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. The mRNA for this gene contains multiple polyadenylation sites, and is alternatively translated from non-AUG (CUG) and AUG initiation codons, resulting in five different isoforms with distinct properties. The CUG-initiated isoforms are localized in the nucleus and are responsible for the intracrine effect, whereas, the AUG-initiated form is mostly cytosolic and is responsible for the paracrine and autocrine effects of this FGF.
Molecular Mass	17 kDa

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Endotoxin	<0.005 EU/μg protein (below level of detection)
Applications	iPSC and ESC maintenance and Expansion; Chemically defined media
Storage	Prepare single use aliquots, add carrier protein if desired, store frozen at -20 or -80 centigrade
Storage Buffer	Frozen in PBS

GENE INFORMATION

Gene Name	FGF2 fibroblast growth factor 2 [Homo sapiens (human)]
Official Symbol	FGF2
Synonyms	FGF2; fibroblast growth factor 2; BFGF; FGF-2; HBGF-2; fibroblast growth factor 2; basic fibroblast growth factor; fibroblast growth factor 2 (basic); heparin-binding growth factor 2
Gene ID	2247
mRNA Refseq	NM_002006
Protein Refseq	NP_001997
MIM	134920
UniProt ID	P09038

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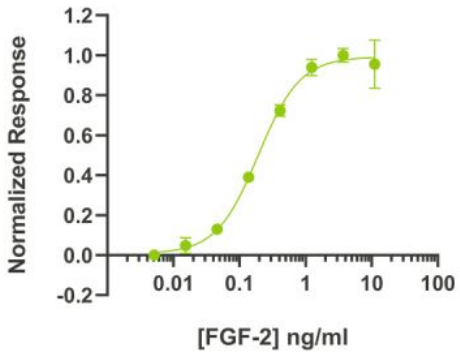
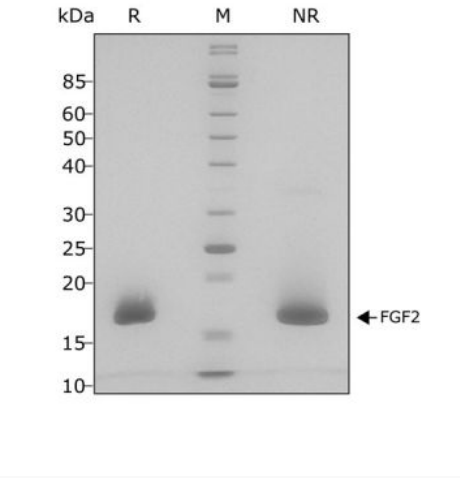
Bioactivity



FGF2 activity is determined using the serum response element luciferase reporter assayin transfected HEK293T cells. EC50 = 0.2 ng/mL (11.7 pM). Cells are treated in triplicate with a serial dilution of FGF2 for 6 hours. Firefly luciferase activity is measured and normalized to the control Renilla luciferase activity.

Purity



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FGF2 migrates as major band at 17 kDa in non-reducing conditions and upon reduction. Purified recombinant protein was resolved using 15% w/v SDS-PAGE in reducedand non-reduced conditionsand stained with Coomassie Brilliant Blue R250.

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