

## FGF2 Screening Kit Growth Factors

## USER GUIDE

### Animal-free, purified fibroblast growth factor 2 from multiple species

Catalog # LSK-104-10, LSK-104-50

## Product Description

FGF2 (basic fibroblast growth factor or bFGF) has been instrumental in the maintenance and differentiation of cells, particularly in serum-free workflows. Previous research has shown the value of cross-species homologs in cell culture applications, including human and non-human cell lines.

Defined Bioscience's FGF2 Screening Kit offers multiple animal-free, recombinantly expressed FGF2 variants for research use. This kit includes four FGF2 variants in easy-to-use aliquots of 10 or 50 µg each, including thermostable and native sequences:

- FGF2-G3 (human): G3 mutations applied to the native FGF2 sequence for *H. sapiens*, human (also provided by Defined Bioscience as Cat # LSR-101)
- FGF2-G3 (bovine/porcine): G3 mutations applied to the native FGF2 sequences for *B. taurus* and *S. scrofa*, domesticated cattle and pig (also provided by Defined Bioscience as Cat # LSR-302)
- FGF2 (chicken): the native FGF2 sequence for *G. gallus*, domestic chicken (also provided by Defined Bioscience as Cat # LSR-202)
- FGF2 (tuna): the native FGF2 sequence for *T. albacares*, yellowfin tuna (also provided by Defined Bioscience as Cat # LSR-120)

All factors are recombinantly expressed in *E. coli* with an N-terminal hexahistidine tag and protease cleavage site. Sample purity is >95% as confirmed by SDS-PAGE (**Figure 1**). All stocks are provided at 1 mg/mL in storage buffer:

- FGF2-G3 (human and bovine/porcine): 10 mM Tris-HCl pH 8.0, 500 mM NaCl, 5 mM bME
- FGF2 (chicken and tuna): 20 mM KPO4 pH 7.5, 500 mM NaCl

## Contents and Storage

Content	Catalog #	Amount	Storage	Shelf life
FGF2 Screening Kit (four variants)	LSK-104-10 LSK-104-50	4 x 10 µg 4 x 50 µg	Store at -20°C protected from light	1 year

## Biological Activity

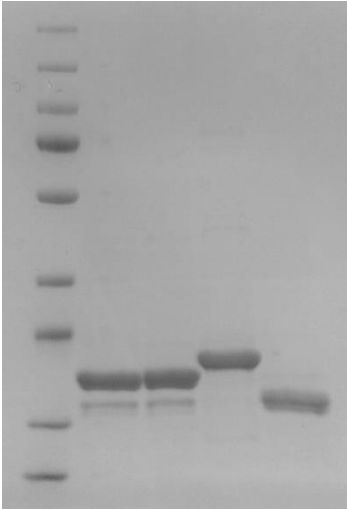
FGF2-G3 (human and bovine/porcine) has an expected EC<sub>50</sub> of less than 1 ng/mL, and FGF2 (chicken tuna) has an expected EC<sub>50</sub> of less than 2 ng/mL, as determined in-house for all lots by an NIH-3T3 cell proliferation assay.

## General Use

Each FGF2 variant included in this kit is supplied as a 1 mg/mL solution in storage buffer that can be incorporated into most standard buffer formulations as needed for downstream use. Dosage testing is recommended for optimal performance.

*For Research Use Only*

## Figures



**Figure 1. Representative SDS-PAGE analysis of purified FGF2 variants from Defined Bioscience.** Percentage purity determined by SDS-PAGE and protein identity by MS/MS analysis. Mass corresponds to the monomeric forms of each variant, with associated tags. RBG BroadRange MWL used in lane 1. Lanes 2-5 correspond to FGF2-G3 (human) LSR-101, FGF2-G3 (bovine/porcine) LSR-302, FGF2 (chicken) LSR-202, and FGF2 (tuna) LSR-120, respectively.

## Limited Product Warranty

Defined Bioscience and/or its affiliate(s) warrant their products as set forth in the Defined Bioscience General Terms and Conditions of Sale. If you have any questions, please contact Defined Bioscience at [info@definedbioscience.com](mailto:info@definedbioscience.com).