#### 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  $\mu$ g 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 EC50 of less than 1 ng/mL, and FGF2 (chicken tuna) has an expected EC50 of less than 2 ng/mL, as determined in-house for all lots by an NIH-3T3 cell proliferation assay.

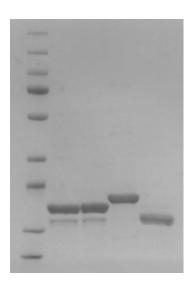
# **General Use**

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



V4 2023 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**

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