



**Healthgen Biotechnology Corp.**

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**Recombinant Human basic Fibroblast Growth Factor (OsrbFGF)  
Lyophilized Powder**

**Source:** Rice Grain (*Oryza Sativa*)

**Catalog No. :** HY201M1

**Introduction:**

Basic fibroblast growth factor, also known as bFGF, FGF2 or FGF- $\beta$ , is a member of the fibroblast growth factor family. It is a single-chain polypeptide growth factor that plays a significant role in the process of promoting cell proliferation, inhibiting cell apoptosis, expediting wound healing and inducing angiogenesis. It is also a very potent inducer of DNA synthesis in a variety of cell types from mesoderm and neuroectoderm lineages.

**Physical Appearance:** White lyophilized powder

**Formulation:** OsrbFGF is lyophilized with OsrHSA as the stabilizer.

**Purity:** Greater than 95% as determined by SDS-PAGE.

**Endotoxin:** Less than 1EU/ $\mu$ g

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**Biological Activity:**

The ED<sub>50</sub> is  $\leq 1$ ng/ml determined by a cell proliferation assay using Balb/c 3T3, corresponding to a specific activity of  $\geq 1 \times 10^6$  Units/mg.

**Applications:**

Mammalian cell culture

Cosmetic and beauty care

Medication for wound healing

**Storage and Handling:**

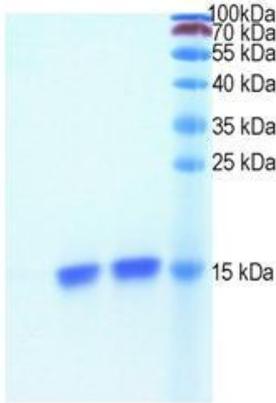
Lyophilized OsrbFGF can remain stable at -20°C for at least 12 months. It is recommended to reconstitute the lyophilized OsrbFGF in sterile water. Use as soon as possible after opening. **Please avoid freeze-thaw cycles.**

**FOR RESEARCH, LABORATORY AND MANUFACTURE USE ONLY. NOT INTENDED FOR DIRECT USE ON HUMANS.**



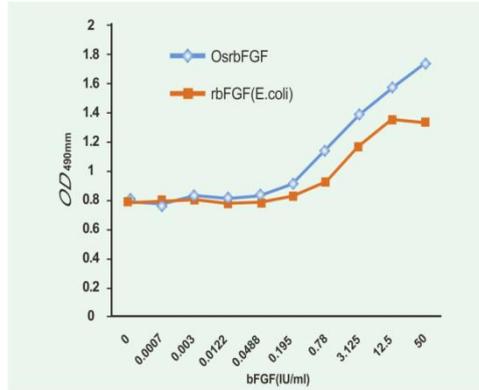
**Recombinant Human basic Fibroblast Growth Factor (*OsrbFGF*) Lyophilized Powder**

**1. SDS-PAGE**



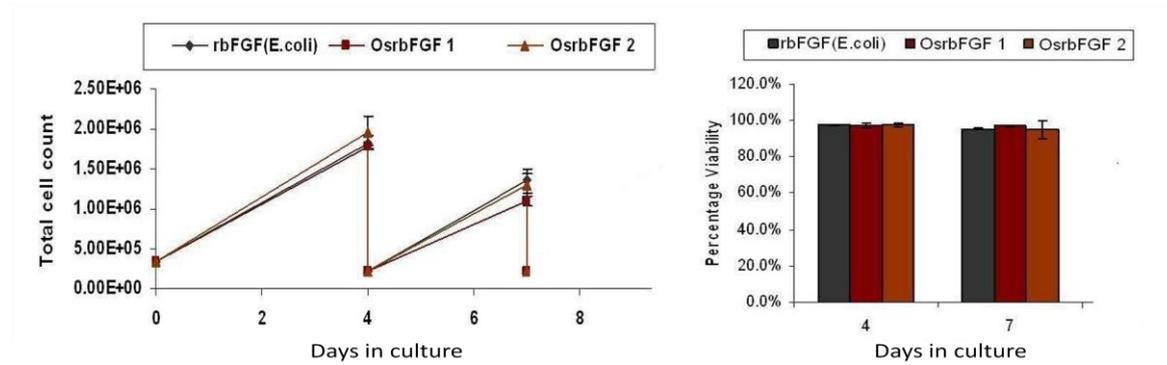
The purity of *OsrbFGF* is higher than 95%. Both batches of *OsrbFGF* only have one band.

**2. Bioactivity**



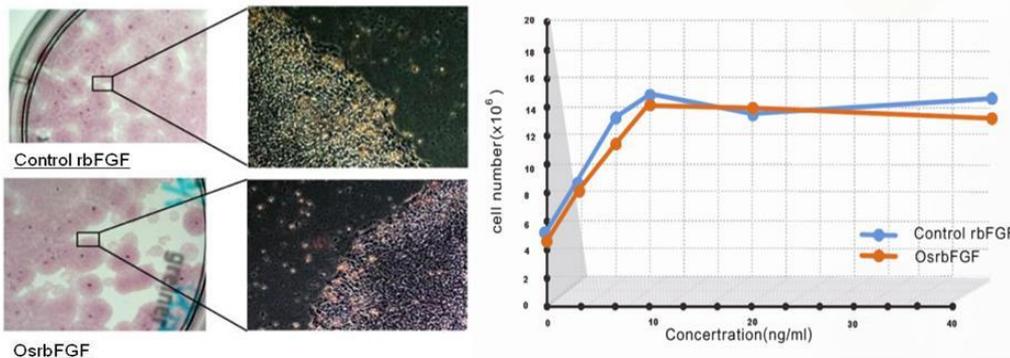
*OsrbFGF* has a higher bioactivity than the commercial E.coli derived rbFGF.

**3. Compared *OsrbFGF* with rbFGF in MSC culture**



The MSC showed similar proliferation and viability in media containing *OsrbFGF* vs. the control media (E. coli derived bFGF). The data from the two lots of *OsrbFGF* suggested that there are no lot specific variations and *OsrbFGF* is suitable for MSC culture.

**4. Compared *OsrbFGF* with rbFGF in MSC culture**



*OsrbFGF* sample showed almost equal performance for feeder-free culture of iPS cells compared to control rbFGF (E.coli).