# FGF2 Protein, Bovine (P. pastoris, N-His)

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| **Cat. No.:** | HY-P700477 |
| **Synonyms:** | Fibroblast Growth Factor 2; FGF-2; Basic Fibroblast Growth Factor; bFGF; Heparin-Binding Growth Factor 2; HBGF-2; Fgf2; Fgf-2 |
| **Species:** | Bovine |
| **Source:** | P. pastoris |
| **Accession:** | P03969 (P10-S155) |
| **Gene ID:** | 281161 |
| **Molecular Weight:** | 18.4 kDa |

## PROPERTIES

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| **AA Sequence** | P A L P E D G G S G A F P P G H F K D P K R L Y C K N G G F F L R I H P D G R V D G V R E K S D P H I K L Q L Q A E E R G V V S I K G V C A N R Y L A M K E D G R L L A S K C V T D E C F F F E R L E S N N Y N T Y R S R K Y S S W Y V A L K R T G Q Y K L G P K T G P G Q K A I L F L P M S A K S |
| **Appearance** | Lyophilized powder |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0. |
| **Endotoxin Level** | <1 EU/μg, determined by LAL method. |
| **Reconsititution** | It is not recommended to reconstitute to a concentration less than 100 μg/mL in $ddH_2O$. |
| **Storage & Stability** | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer. It is recommended to freeze aliquots at -20°C or -80°C for extended storage. |
| **Shipping** | Room temperature in continental US; may vary elsewhere. |

## DESCRIPTION

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| **Background** | FGF2 Protein serves as a versatile ligand, binding to FGFR1, FGFR2, FGFR3, and FGFR4, and also functions as an integrin ligand crucial for FGF2 signaling. The interaction with integrin ITGAV:ITGB3 is essential for this signaling pathway. FGF2 plays a pivotal role in regulating cell survival, cell division, cell differentiation, and cell migration. Additionally, it acts as a potent mitogen in vitro and has the capability to induce angiogenesis. FGF2's influence extends to promoting retinal lens fiber differentiation through the phosphorylation of ERK1/2. Existing as a monomer or homodimer, FGF2 interacts with its receptors FGFR1, FGFR2, FGFR3, and FGFR4, and its affinity for these receptors is enhanced by heparan sulfate glycosaminoglycans. Furthermore, FGF2 forms complexes with other proteins such as CSPG4, FGFBP1, TEC, and FGFBP3, contributing to its diverse cellular functions. The interaction with integrin ITGAV:ITGB3 is indispensable for FGF2 signaling, and additional interactions with SNORC and glypican GPC3 further illustrate the intricate network of FGF2-associated |

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| | proteins. |

**Caution: Product has not been fully validated for medical applications. For research use only.**

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