

FGF-23, Human Recombinant

CATALOG #: 7151-10 10 µg
7151-50 50 µg

ALTERNATE NAMES: Fibroblast Growth Factor-23

SOURCE: E. Coli

PURITY: ≥ 95% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 22.5 kDa

ENDOTOXIN LEVEL: < 0.1 ng/µg of protein (<1EU/µg).

FORM: Lyophilized

FORMULATION: Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM sodium phosphate, pH 8.0 and 50 mM NaCl.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

RECONSTITUTION:
Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:
The FGF family plays a central role during prenatal development and postnatal growth and regeneration of a variety of tissues, by promoting cellular proliferation and differentiation. FGF-23, FGF-21 and FGF-19 constitute an atypical FGF subfamily whose ligands act as circulating hormones and require the participation of a Klotho protein as a co-receptor for their signaling. FGF-23 is a bone-derived hormone that acts in the kidney to regulate phosphate homeostasis and vitamin D metabolism. The signaling receptor for FGF-23, a Klotho-FGFR1 (IIIc) complex, is an essential regulator of the renal sodium phosphate co-transporter and key vitamin D-metabolizing enzymes CYP27B1 and CYP24A1. Recombinant human FGF-23 is a 22.5 kDa globular protein containing 228

amino acid residues.

AMINO ACID SEQUENCE:
MYPNASPLLG SSWGGLIHLV TATARNSYHL QIHKNGHVDG APHQTIYSAL
MIRSEDAGFV VITGVMSRRY LCMDFRGNIF GSHYFDPENC RFQHQTLENG
YDVYHSPQYH FLVSLGRAKR AFLPGMNPPP YSQFLSRRNE IPLHFNTPI
PRRHTRSAED DSERDPLNVL KPRARMTAP ASCSQELPSA EDNSPMASDP
LGVVRGGRVN THAGGTGPEG CRPFAKFI

- RELATED PRODUCTS:**
- FGF- basic, murine recombinant (Cat # 7145-10, -50)
 - Human Cell^{exp} Human Recombinant FGF-4 (Cat # 6449-10, -50)
 - Human Cell^{exp} Human Recombinant FGF-7 (Cat # 6450-10, -50)
 - Human Cell^{exp} Human Recombinant FGF-8b (Cat # 6451-10, -50)
 - FGF- basic 147, human recombinant (Cat # 4036-10, -50, -1000)
 - FGF-1, human recombinant (Cat # 4034-10, -50, -1000)
 - FGF-1, murine recombinant (Cat # 4035-10, -50, -1000)
 - FGF-10/KGF-2, human recombinant (Cat # 4060-25, -100, -1000)
 - FGF-18, human recombinant (Cat # 4082-25, -100, -1000)
 - FGF-19, human recombinant (Cat # 4542-25, -100, -1000)
 - FGF-2, bovine recombinant (Cat # 4040-10, -50, -1000)
 - FGF-2, human recombinant (Cat # 4037-10, -50, -1000)
 - FGF-2, murine recombinant (Cat # 4038-10, -50, -1000)
 - FGF-2, rat recombinant (Cat # 4039-10, -50, -1000)
 - FGF-20, human recombinant (Cat # 4589-20, -100)
 - FGF-21, human recombinant (Cat # 4066-100, -1000)
 - FGF-21, murine recombinant (Cat # 4067-10, -1000)
 - FGF-22, human recombinant (Cat # 4063-10, -100, -1000)
 - FGF-4, human recombinant (Cat # 4043-25, -100, -1000)
 - FGF-7/KGF, human recombinant (Cat # 4050-10, -50, -1000)
 - FGF-8, human recombinant (Cat # 4053-25, -100, -1000)
 - FGF-9, human recombinant (Cat # 4056-20, -1000)

FOR RESEARCH USE ONLY! Not to be used in humans.