9051 Mira Mesa Blvd, #910094
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Tel: 760-390-3989

GDF7 Human

Growth and Differentiation factor 7 Human Recombinant
CYK0180

Product Overview

Name	GDF7 Human
Description	
Growth and Differentiation factor 7 Human Recombinant	
Accession (Primary)	Q7Z4P5
Synonyms	
Growth Differentiation Factor 7, GDF-7, Growth/Differentiation Factor 7, BMP12, GDF7.	
Introduction	
Growth Differentiation Factor-7 (GDF-7) belongs to the BMP family of TGF-b superfamily proteins. GDF7 elicits its bioactivity via a heterodimeric receptor complex comprised of a type 1 (BMPR-IB) and a type II (BMPR-II or Activin RII) serine/threonine kinase receptor. GDF7 signaling results in the phosphorylation and activation of Smad proteins. GDF-7 is also involved in tendon and ligament formation and repair. In addition, GDF7 regulates bone formation, mesenchymal stem cell differentiation, neuronal differentiation, and axon guidance.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from a 0.2 μm filtered solution in HCl.	
Stability	
Lyophilized GDF7 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GDF-7 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	
Greater than 95.0% as determined by SDS-PAGE.	
Amino acid sequence	
TALAGTRTAQ GSGGGAGRGH GRRGRSRCSR KPLHVDFKEL GWDDWIIAPL DYEAYHCEGL CDFPLRSHLE PTNHAIIQTL LNSMAPDAAP ASCCVPARLS PISILYIDAA NNVVYKQYED MVVEACGCR.	
Biological Activity	

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The ED 50 , as determined by inducing alkaline phosphatase production by mouse ATDC5 cells, is less than 1.25 µg/ml.

Solubility

It is recommended to reconstitute the lyophilized GDF-7 in sterile 18M-cm H 2 O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

GDF7 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q7Z4P5)