

## Product datasheet for **TP723136**

### **GDF7 (NM\_182828) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Purified recombinant protein of Human growth differentiation factor 7 (GDF7).
<b>Species:</b>	Human
<b>Expression Host:</b>	E. coli
<b>Expression cDNA Clone or AA Sequence:</b>	TALAGTRTAQ GSGGGAGRGH GRRGRSRCSR KPLHVDFKEL GWDDWIIAPL DYEAYHCEGL CDFPLRSHLE PTNHAIQTL LNSMAPDAAP ASCCVPARLS PISILYIDAA NNVVYKQYED MVVEACGCR
<b>Tag:</b>	Tag Free
<b>Predicted MW:</b>	28 kDa
<b>Concentration:</b>	lot specific
<b>Purity:</b>	>95% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	Lyophilized from a 0.2 $\mu$ M filtered solution of 20mM phosphate buffer, 100mM NaCl, pH 7.2
<b>Bioactivity:</b>	Determined by its ability to inhibit induced alkaline phosphatase production by ATDC-5 chondrogenic cells.
<b>Endotoxin:</b>	Endotoxin level is < 0.1 ng/ $\mu$ g of protein (< 1 EU/ $\mu$ g)
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
<b>RefSeq:</b>	<a href="#">NP_878248</a>
<b>Locus ID:</b>	151449
<b>UniProt ID:</b>	<a href="#">Q7Z4P5</a> , <a href="#">Q75RY1</a>
<b>RefSeq Size:</b>	1994
<b>Cytogenetics:</b>	2p24.1
<b>RefSeq ORF:</b>	1350
<b>Synonyms:</b>	BMP12



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**Summary:**

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein may play a role in the differentiation of tendon cells and spinal cord interneurons. A mutation in this gene may be associated with increased risk for Barrett's esophagus and esophageal adenocarcinoma. [provided by RefSeq, Sep 2016]

**Protein Families:**

Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Secreted Protein, Stem cell relevant signaling - TGFb/BMP signaling pathway

**Protein Pathways:**

TGF-beta signaling pathway

**Product images:**