GFE17AF Recombinant Equine PDGF-BB (Animal Free)

Description

Platelet-derived growth factor (PDGF) is an important regulator of cell growth, proliferation, and angiogenesis. PDGF synthesis is induced by IL-1, IL-6, TNF-α, TGF-β, and EGF signaling. PDGF functions as a mitogenic growth hormone on cells of mesenchymal lineage, such as smooth muscle and glial cells. PDGF is also stored in the alpha-granules of platelets and is released upon adherence to traumatized tissues. PDGF is a dimeric glycoprotein formed by two A chains (AA), two B chains (BB), or as a heterodimer with an A and a B chain (AB). The PDGF dimer binds the cell surface receptor tyrosine kinases PDGFR-α and PDGFR-β.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

Length	110/220 aa
Molecular weight	24.8 kDa
Source	*E. coli*
Accession number	XP_005606703
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

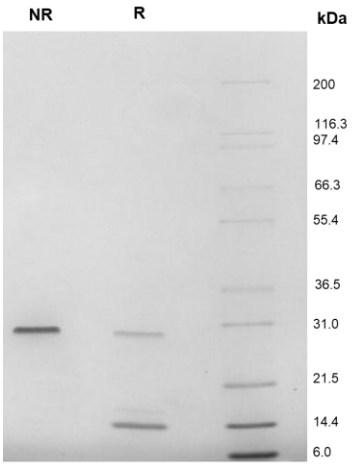
Specifications

Alternative names	GDGF, ODGF
Biological activity	Equine PDFG-BB is fully biologically active when compared to standard. The activity is determined by the dose-dependent proliferation of NR6R-3T3 cells, and it is typically less than 30 ng/ml.
Endotoxin level	≤0.1 EU/µg as measured by kinetic LAL
Formulation	Lyophilized from a 0.2 µm filtered solution containing 10 mM sodium phosphate, pH 7.5
AA sequence	MSLGSLAVAE PAMIAECKTR TEVFEISRRL IDRTNANFLV WPPCVEVQRC SGCCNNRHVQ CRPTQVQLRP VQVRKIEIVR KKPTFKKATV TLEDHLACKC ETVGAARPVT

Preparation and storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with Sterile 20 mM HCl at 0.1 mg/ml, which can be further diluted into other aqueous solutions. If a precipitate is observed, centrifuge the solution thoroughly and use only the soluble fraction (removing it from the precipitate). A 10% overfill has been added to compensate for any loss of protein in the precipitate.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



SDS-PAGE Showing a Single Prominent Band at ~24.8 kDa

rEq PDGF-BB(1µg) was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Instant Blue staining showing a single prominent band at ~28 kDa