

# Certificate of Analysis



Recombinant Human PDGF-BB

Catalog Number: 100-18

Lot Number: 0707-100-18

## Product Description

**Alternate Names:** GDGF, ODGF      **Accession/Uniprot Number:** P01127

**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- $\alpha$ , TGF- $\beta$  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- $\alpha$  and PDGFR- $\beta$ .

**Source:** Genetically modified *E.coli*.

**Predicted MW:** Dimer, 12.4/24.9 kDa (110/220 amino acids)

**AA Sequence:** MSLGSLTIAE PAMIAECKTR TEVFEISRRL IDRTNANFLV WPPCVEVQRC SGCCNNRNVQ CRPTQVQLRP VQVRKIEIVR KKPIFKKATV TLEDHLACKC ETVAAARPVT

**Formulation:** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM acetic acid

## Product Specifications

Specification	Method of Determination	Acceptance Criteria	Result
Purity	Reducing and Non-reducing SDS-PAGE	$\geq 95\%$	$> 95\%$
Endotoxin	Kinetic LAL (50% confidence)	$\leq 1$ EUs/ug	0.05 EUs/ug
Biological Activity	BALB/c 3T3 cell proliferation	ED50 $\leq 20$ ng/mL ( $\geq 5.0 \times 10^4$ units/mg)	ED50 = 1.86 ng/mL ( $5.4 \times 10^5$ units/mg)

## Product Preparation and Storage

**Country of Origin:** USA      **Shipping:** Room temperature      **Storage Prior to Reconstitution:** -20°C

**Reconstitution:** Sterile water at 0.1 mg/mL      **Date of Recon.:** \_\_\_\_\_ **Initials:** \_\_\_\_\_

Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws.

**Expiration Date:** \_\_\_\_\_ **Date Received:** \_\_\_\_\_

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.

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**

*Olivia Schneider, PhD 4/27/17*

Quality Control