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DATA SHEET

Version: 01
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1. Identification

Product name	**Recombinant Human PDGF-BB** 50 µg
Cat. No	CR013

2. Description

Canvax Recombinant Human PDGF-BB is a high-purity, carrier-free, disulfide-linked homodimer produced in *E. coli* and designed to support robust proliferation, migration and survival in mesenchymal and neuronal cell types. This biologically active 25 kDa PDGF-BB dimer promotes expansion of MSCs, enhances osteogenic and neuronal differentiation, and is widely used in tissue repair, angiogenesis and wound-healing studies.

Its animal-origin–free formulation, clean SDS-PAGE profile and stringent QC (purity, endotoxin, sterility and mycoplasma) ensure consistent performance in defined culture systems. Delivered as a stable lyophilized powder, PDGF-BB enables easy handling, efficient reconstitution and reliable lot-to-lot reproducibility for demanding research workflows.

A GMP-grade version suitable for therapeutic and regulated manufacturing environments is available upon request

3. Product information

Expression system	*E. coli* recombinant production.
Sequence	Human PDGF-BB homodimer (PDGF-B / PDGF-B), UniProt P01127.
Molecular Weight	~25 kDa (dimer, non-reducing) ~13 kDa per monomer (reducing)
Structure	Disulfide-linked homodimer of PDGF-B chains
Purity	≥ 98% (SDS-PAGE).
Identity	Confirmed by mass spectrometry.
Endotoxin	<0.05 EU/µg protein.
Bioactivity	Validated using NFAT-responsive luciferase assay in HEK293 cells expressing PDGFRB.
Form	Lyophilized powder.
Formulation	Lyophilized from acetonitrile and TFA
Reconstitution	Dissolve in sterile water (>50 µg/mL)
Recovery	>95% after reconstitution.
Lot-to-lot consistency	Ensured through controlled manufacturing and analytical release testing.

4. Storage specifications

Store the lyophilized protein at –20 ˚C for general use. Avoid repeated freeze–thaw cycles. Once reconstituted, aliquot and store at –80 ˚C.

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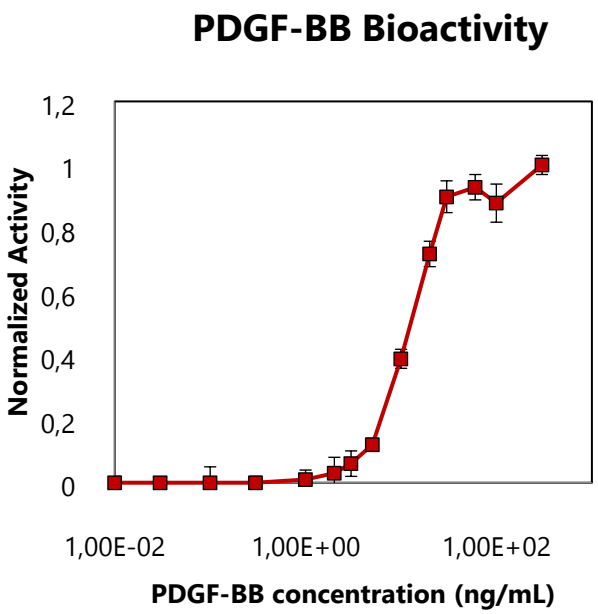
5. Applications

- Proliferation, migration and survival of mesenchymal cell types (fibroblasts, MSCs, VSMCs).
- Expansion of iPSC/ESC and MSC cultures.
- Neural stem-cell proliferation and neuronal differentiation.
- Osteogenic differentiation and tissue-engineering workflows.
- Angiogenesis, wound-healing and regenerative biology models.

A GMP-grade variant is also available for cell-therapy, regenerative-medicine and advanced therapeutic manufacturing workflows.

6. Bioactivity assay

PDGF-BB activity was determined using an NFAT-responsive luciferase assay in HEK293 cells transfected with PDGFRB. Cells were treated in triplicate with a serial dilution of PDGF-BB for 6 hours. Firefly luciferase activity was measured and normalized to the maximum response..
EC50 ≈ 12.7 ng/mL



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7. Further information

RUO This product is sold as RUO (Research Use Only), not for diagnostic or therapeutic use in humans or animals. GMP-grade production can be provided on request. Full regulatory documentation is available for GMP-manufactured batches. Contact us (info@canvaxbiotech.com).

Disclaimer The information provided in this Data Sheet is correct to the best of our knowledge and belief at the date of publication. This information is intended only as a guide and should not be taken as a warranty or quality specification. Canvax Reagents S.L.U. shall not be held liable for any damage resulting from handling or from contact with the above product.