**Canvax Reagents, S.L.U.**
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# DATA SHEET

Version: 01
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## 1. Identification

**Product name** **Recombinant Human TGF-β3**
10 µg

**Cat. No** CR003

## 2. Description

TGF-β3 is a multifunctional cytokine from the TGF-β superfamily, involved in processes such as cell differentiation, proliferation, embryonic development, and wound healing. This recombinant version is produced using a proprietary plant-based expression system, allowing for high purity, scalability, and endotoxin levels below detection limit, without the use of animal-derived components, resulting in a non-glycosylated homodimeric protein. The product is vacuum-dried for improved stability and convenient reconstitution.

## 3. Product information

| | |
|---|---|
| **Expression system** | Plant-based recombinant production (non-glycosylated protein) |
| **Sequence** | *Homo sapiens* TGF-β3 (112 aa) |
| **Molecular Weight** | 25.4 kDa (by mass spectrometry) |
| **Structure** | Homodimer with disulfide bonds |
| **Bioactivity** | Validated in HEK293 cells using a luciferase reporter assay |
| **Purity** | > 95% (SDS-PAGE) |
| **Form** | Vacuum-dried powder |
| **Recommended Reconstitution** | 10 mM citric acid : water (1:1) with 0.2% BSA in PBS |
| **Endotoxin** | <0.0005 EU/µg |

## 4. Storage specifications

Store at –20 °C for short- to mid-term use. For long-term, store at –80 °C. Avoid repeated freeze-thaw cycles.
Once disolved, aliquot and store at –80 °C.

## 5. Applications

- TGF-β signaling pathway studies
- *In vitro* cell differentiation assays
- Wound healing and fibrosis models
- Functional assays using HEK293 or other responsive cell lines

## 6. Quality Control

Bioactivity confirmed using HEK293 cells transfected with a TGF-β responsive luciferase reporter. Exposure to plant-derived TGFB3 resulted in a clear luminescent response, demonstrating strong biological activity.

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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.

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