

## Certificate of Analysis

<b>Protein ID:</b>	Qk010
<b>Protein Name:</b>	Recombinant human TGF- $\beta$ 1 PLUS
<b>Batch Number:</b>	011
<b>QC Release Date:</b>	21 <sup>st</sup> July 2020
<b>Physical Appearance:</b>	Lyophilised from Acetonitrile, TFA

### Results

Test	Specification	Result
Endotoxin Assay	<0.1 EU/ $\mu$ g protein	<0.005 EU/ $\mu$ g protein
UV Recovery	0.95 – 1.15 mg/ml	0.96 mg/ml
Bioactivity Assay (EC50)	0.4-4 pM	1.9 pM
Purity: Reverse phase chromatography	Single sharp peak	Single sharp peak
Purity: SDS-PAGE gel	Analysis of a non-reduced sample shows only the expected dimeric TGF- $\beta$ 1 PLUS	
Mass Spectrometry	Shows a single species with expected mass	

### Storage and Handling

#### Reconstitution instructions:

Centrifuge briefly before reconstituting.

Resuspension in physiological buffers may cause precipitation of stock solutions, hence we recommend dissolving our lyophilized cytokines in 10 mM HCl (1:1000 dilution of concentrated HCl).

Reconstitute to a protein concentration of 0.05–1.0 mg/ml.

Allow the reconstituted sample to sit at room temperature for a few minutes before pipetting up and down gently to avoid foaming.

For maximum protein recovery of larger sample sizes, resuspend in approximately 80% of the total HCl volume as above, transfer reconstituted sample to a fresh tube and rinse the original tube with the remaining HCl. Pool the samples.

Our proteins are supplied carrier protein-free. If compatible with your work, add carrier protein.

We recommend that single use aliquots are prepared to avoid freeze-thaw cycles.

**Store at:** -20 °C (short term) -80 °C (long term)

Details of bioactivity assays and further information can be found online at:

[www.qkine.com/product/recombinant-human-tgf-b1-plus-protein/](http://www.qkine.com/product/recombinant-human-tgf-b1-plus-protein/)

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*Approved by: JJ (Scientific Operations Manager)*