Product Information

Transforming Growth Factor-β2 Human

TGF-β2, recombinant, expressed in HEK 293 cells, HumanKine®, suitable for cell culture

H8666

Storage Temperature –20 °C
Synonyms: TGF-β2

Product Description

HumanKine® TGF-β2 is expressed in human 293 cells as a mature, non-glycosylated, disulfide-linked homodimer with a predicted molecular mass of ~25 kDa.

TGF- β2 belongs to the TGF- β superfamily. TGF- β2 is important for immune homeostasis by balancing lymphocyte proliferation, apoptosis, hematopoiesis, and embryogenesis. TGF- β2 is crucial in cell growth, differentiation, and survival. TGF- β2 is a strong growth inhibitor for normal and transformed epithelial, lymphoid, fibroblast, and keratinocyte cells. TGF- β2 is a tumor suppressor in the early stages of carcinogenesis, but in the later stages acts as a tumor promoter by inducing epithelial-mesenchymal transition and stimulating angiogenesis. TGF- β2 inhibits NK cells growth as well as B and T cell proliferation.

This product is lyophilized from a solution of 50 mM sodium acetate, pH 4.5.

EC_{50}: ≤0.5 ng/mL

The specific activity was determined by the dose-dependent inhibition of IL-4 induced proliferation of mouse HT-2 cells (BALB/c spleen activated by sheep erythrocytes in the presence of IL-2).

Purity: ≥95% (SDS-PAGE)

Endotoxin level: ≤1 EU/µg

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile 4 mM HCl containing 0.1% endotoxin-free recombinant human serum albumin.

Storage/Stability

Store the product at –20 °C. The lyophilized product remains active for one year at –20 °C.

Upon reconstitution, the cytokine can be stored at 2–8 °C for short term only, or at –20 °C to –80 °C in aliquots for long term. Avoid repeated freeze-thaw cycles.

References

1. Tsang, M., et al., Cytokine, **7**, 389 (1995).
2. Sporn, M.B., et al., Cytokine Growth Factor Rev., **17**, 3-7 (2006).

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