TGF-β2 active, human recombinant, expressed in Nicotiana benthamiana

Catalog Number T9580
Storage Temperature –20 °C

Product Description
Transforming growth factor-β is a family of five related cytokines that have been shown to be present in a wide variety of normal and neoplastic cells, indicating the importance of these homodimer proteins as multifunctional regulators of cellular activity. The three mammalian isoforms of TGF-β (TGF-β1, TGF-β2, and TGF-β3) signal through the same receptor and elicit similar biological responses. They are involved in physiological processes as embryogenesis, tissue remodeling, and wound healing.

Recombinant human TGF-β2 is lyophilized from 0.05 M Tris-HCl buffer, pH 7.4. It is produced by transient expression of TGF-β2 in non-transgenic plants. Recombinant human TGF-β2 contains a 6-His-tag at the N-terminal end and is purified by sequential chromatography (FPLC).

This product is Xeno-free, containing no animal-derived components nor impurities.

Molecular mass: 27.08 kDa
(composed of two identical 118 amino acid chains linked by a single disulfide bond)

Sequence:
HHHHHALDAAYCFRNVQDNCCLRPLYIDFKRDLGW
KWIHEPKGYNANFCAGACPYLWSSTDQHRSVLSLYN
TINPEASPCVSQDLEPLITYIGKTPKIEQLSNMI
VKSCKCS

Purity: >97% (SDS-PAGE)

ED₅₀: ≤50 ng/mL

Biological activity: The biological activity of TGF-β2 is measured in culture by its ability to inhibit mink lung epithelial (Mv1Lu) cell proliferation.

Endotoxin: <0.04 EU per 1 µg of the protein (LAL method)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
The lyophilized protein should be reconstituted in water to a concentration of 25–50 ng/µL. It is recommended to add a carrier protein (0.1% HSA or BSA). Due to the protein nature, dimers and multimers may be observed.

Storage/Stability
The product ships at ambient temperature. Upon receiving, store it immediately at –20 °C or below.

Upon reconstitution, aliquot and store under sterile conditions at –20 °C or below. Avoid repeated freeze/thaw cycles.

References

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