

Recombinant Human TGFβ2 / Transforming Growth Factor beta 2, Animal Free & Carrier Free

Cat #: C-CYP295

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

TGF-β2 is a secreted protein known as a cytokine that performs many cellular functions and has a vital role during embryonic development. TGF-β2 signaling begins with binding to a complex of the accessory receptor betaglycan and a type II ser/thr kinase receptor termed TGF-beta RII. This receptor then phosphorylates and activates another ser/thr kinase receptor, TGF-beta RI, or alternatively, ALK-1. The whole complex phosphorylates and activates Smad proteins that regulate transcription (3, 11, 12). Use of other signaling pathways that are Smad independent allows for disparate actions observed in response to TGF-beta in different contexts..

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

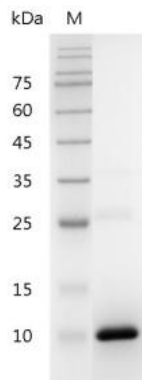
Biological Activity: Measure by its ability to inhibit IL-4-induced proliferation in HT-2 cells. The ED₅₀ for this effect is <0.2 ng/mL. The specific activity of recombinant human TGF beta 2 is >5 x 10⁶ IU/mg.

Endotoxin: <0.1 EU per 1 µg of the protein by the LAL method.

Amino acid sequence:

MALDAAAYCFRNVDNCCLRPLYIDFKRDLGWKWIHEPKGYNANFCAGACPYLWSSDTQHSRVLSLYNTINPEASASPCCVSQDLEPLTILYY
IGKTPKIEQLSNMIVKSKCS with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 20mM sodium citrate, 0.2M NaCl, pH 3.5.



SDS-PAGE analysis of recombinant human TGF beta 2

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile 10mM HCl. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.