

Recombinant Human, TGFβ3 / Transforming Growth Factor beta 3, Animal Free & Carrier Free

Cat #: C-CYP383

Size: 5μg, 20μg, 100μg, 500μg, 1mg

Shipping: Blue Ice

Product Overview

Transforming growth factor-beta 3 (TGF-β3), also named TGFB3, is a member of the TGF beta family of growth factors together with TGF- β1 and -2. TGFB3 is produced as a complex with LAP. This latent form of TGFB3 can be stimulated upon cleavage by plasmin, matrix metalloproteases, thrombospondin -1, and a subset of integrins. It binds with high affinity to TGF- β RII, a type II serine/threonine kinase receptor. TGFB3 take part in the process such as cell differentiation, embryogenesis and development. In addition, it is found to regulate molecular elements involved in cellular adhesion and extracellular matrix (ECM) formation during the process of palate development.

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 -induce proliferation in HT-2 cells. The ED50 for this effect is <50 pg/mL. The specific activity of recombinant human TGF beta 3 is >2 x 10⁷ IU/mg.

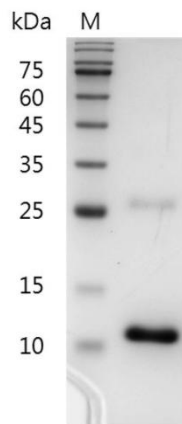
Endotoxin: <0.1EU per 1μg of the protein by the LAL method.

Amino acid sequence:

MALDTNYCFRNLEENCCVRPLYIDFRQDLGWKVVHEPKGYANFCSGPCPYLRSADTTHSTVLGLYNTLNPEASASPCCVQDLEPLTILYY

VGRTPKVEQLSNMVKCKCS 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 3

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.