

Recombinant Human/Mouse/Rat TGFB3

Catalog No.: RP0057

Basic Information

Information

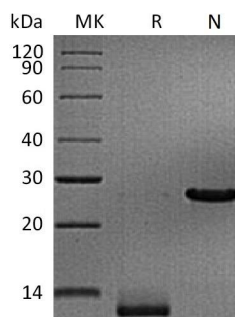
Source	<i>Human Cells</i>
Description	Recombinant Human/Mouse/Rat Transforming Growth Factor Beta 3 is produced by our Mammalian expression system and the target gene encoding Ala301-Ser412(Tyr340Phe) is expressed.
Accession	P10600
Known As	Transforming growth factor beta-3; TGFB3; TGF-beta-3; Latency-associated peptide; LAP
Predicted Mol Mass	12.7 KDa
Apparent Mol Mass	12-14 KDa, reducing conditions

Properties

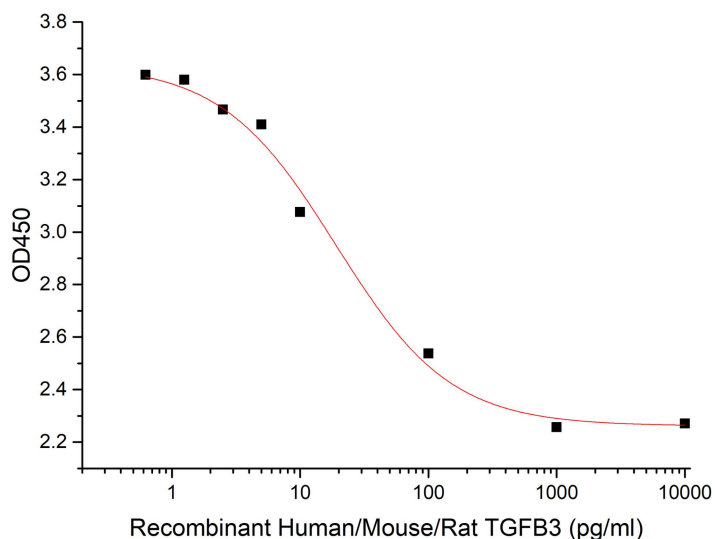
Formulation	Lyophilized from a 0.2 μ m filtered solution of 50mM Glycine-HCl, 150mM NaCl, pH 2.5.
Storage	Lyophilized protein should be stored at $\leq -20^{\circ}\text{C}$, stable for one year after receipt. Reconstituted protein solution can be stored at $2-8^{\circ}\text{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}\text{C}$ for 3 months.
Endotoxin	< 0.01 EU/ μ g as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

Experimental Data

Purity-SDS-PAGE



Bioactivity-Cell Based Assay



Greater than 95% as Measured by its ability to inhibit the IL-4-dependent proliferation of determined by reducing TF-1 mouse T cells. The ED50 for this effect is 10-80 pg/ml. (QC SDS-PAGE. (QC verified) verified)

Background

Transforming growth factor beta 3(TGFB3) is a member of a TGF- β superfamily which is defined by their structural and functional similarities. TGFB3 is secreted as a complex with LAP. This latent form of TGFB3 becomes active 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 is involved in cell differentiation, embryogenesis and development. It is believed to regulate molecules involved in cell adhesion and extracellular matrix (ECM) formation during the process of palate development. Without TGF- β 3, mammals develop a deformity known as a cleft palate.