

Recombinant Human TGF-beta 1

Catalog No.: RP0006

Basic Information

Information

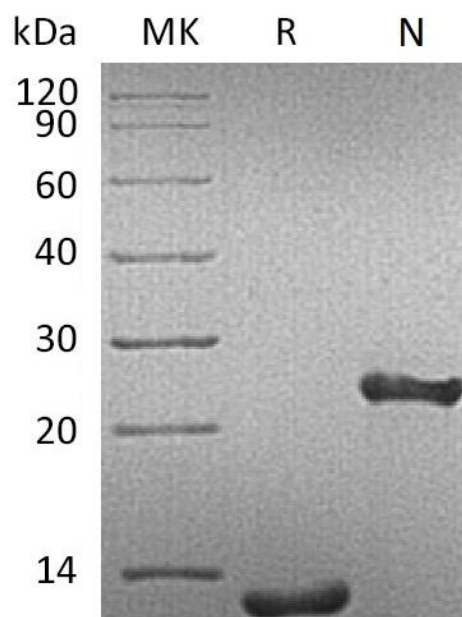
Source	<i>Human Cells</i>
Description	Recombinant Human Transforming Growth Factor Beta 1 is produced by our Mammalian expression system and the target gene encoding Ala279-Ser390 is expressed.
Accession	P01137
Known As	Transforming Growth Factor Beta-1; TGF-Beta-1; Latency-Associated Peptide; LAP; TGFB1; TGFB
Predicted Mol Mass	12.8 KDa
Apparent Mol Mass	13 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 µm filtered solution of 50mM Glycine-HCl, 150mM NaCl, pH 2.5.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/µg 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 100µg/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.

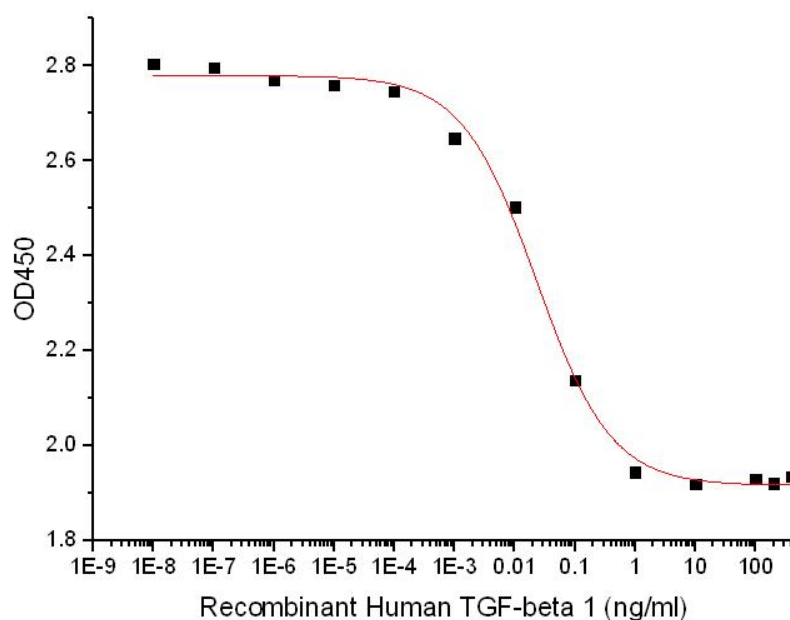
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured by its ability to inhibit the IL-4-dependent proliferation of TF-1 human erythroleukemic cells. The ED50 for this effect is 4-40 pg/ml. (QC verified)

Background

Transforming Growth Factor β -1 (TGF β -1) is a secreted protein which belongs to the TGF β family. TGF β -1 is abundantly expressed in bone, articular cartilage and chondrocytes and is increased in osteoarthritis (OA). TGF β -1 performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation and apoptosis. The precursor is cleaved into a latency-associated peptide (LAP) and a mature TGF β -1 peptide. TGF β -1 may also form heterodimers with other TGF β family members. It has been found that TGF β -1 is frequently upregulated in tumor cells. Mutations in this gene results in Camurati-Engelmann disease.