

Recombinant Human TGFB1/TGF-beta 1 Protein

Catalog Number: PKSH032007

Note: Centrifuge before opening to ensure complete recovery of vial contents.

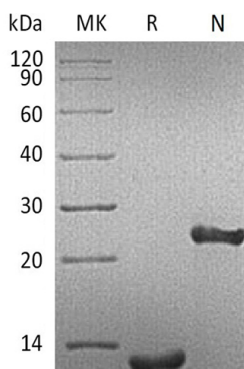
Description

Species	Human
Source	CHO Stable Cells-derived Human TGFB1;TGF-beta 1 protein Ala279-Ser390
Calculated MW	12.8 kDa
Observed MW	13 kDa
Accession	P01137
Bio-activity	Measured by its ability to inhibit the IL-4-dependent proliferation of TF- 1 human erythroleukemic cells. The ED ₅₀ for this effect is 4-40 pg/ml

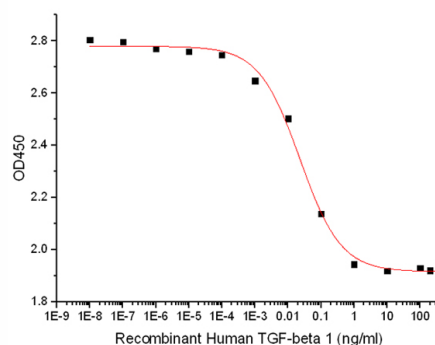
Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 50mM Glycine-HCl, 150mM NaCl, pH 2.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



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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.