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Datasheet for 009-001-W26-0100

rHuman TGF beta1 Protein

Overview

Description:	Human Transforming Growth Factor beta 1 Recombinant Protein - 009-001-W26-0100
Item No.:	009-001-W26-0100
Size:	100 µg
Applications:	Cellular Assay
Origin:	Human
Expressed in:	CHO cells

Product Details

Background:	Transforming Growth Factor-beta 1 (TGF-β1) is a member of the TGF-beta superfamily. Members of this family are known to exhibit regulatory activity in immunity and proliferation pathways. TGF-β1 signals through SMAD proteins via the TGF-β1 RI and RII receptors. Mature human TGF-β1 is a glycosylated homodimer, containing two 112 amino acids chains, with a total molecular weight of 25 kDa.
Synonyms:	Differentiation inhibiting factor, cartilage-inducing factor
Species of Origin:	Human
Expressed in:	CHO cells
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	TGFB1
Purity/Specificity:	Transforming Growth Factor beta 1 purity was determined to be greater than 98% as determined by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P01137

Application Details

Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Transforming Growth Factor beta 1 Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Transforming Growth Factor beta 1 in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is measured by the dose-dependent inhibition of IL-4-induced proliferation from mouse HT-2 cells and is typically 0.04-0.2 ng/mL.

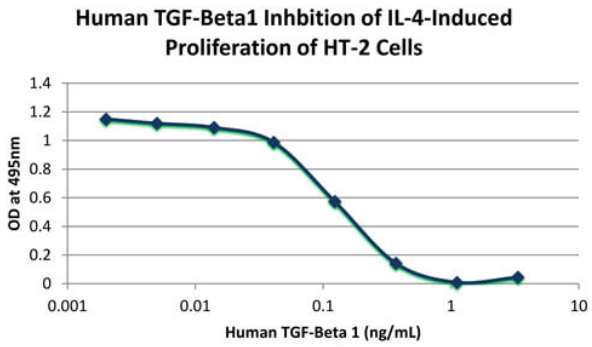
Formulation

Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

Bioactivity of Human Transforming Growth Factor beta 1 Recombinant Protein. Serial dilutions of Human TGF-Beta 1 (starting at 10 ng/mL) were added to HT-2 cultured with IL-4. Cell proliferation was measured and the linear portion of the curve was us used to calculate the ED50. The ED50 of Human TGF-Beta 1 is between 0.1-0.15 ng/mL. This is comparable to the expected range of 0.04-0.2 ng/mL for this assay.

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