

Product datasheet for TP723439

TGF beta 1 (TGFB1) (NM_000660) Human Recombinant Protein

Product data:

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| Product Type: | Recombinant Proteins |
| Description: | Purified recombinant protein of Human transforming growth factor, beta 1 (TGFB1). |
| Species: | Human |
| Expression Host: | CHO |
| Expression cDNA Clone or AA Sequence: | ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK VLALYNQHNP GASAAPCCVP QALEPLPIVY YVGRKPKVEQ LSNMIVRSCK CS |
| Tag: | Tag Free |
| Predicted MW: | 25 kDa |
| Concentration: | lot specific |
| Purity: | >95% as determined by SDS-PAGE and Coomassie blue staining |
| Buffer: | Lyophilized from a 0.2 µM filtered solution of 20mM phosphate buffer, 100mM NaCl, pH 7.2 |
| Bioactivity: | ED50 was determined by TGF-beta1's ability to inhibit the mouse IL-4-dependent proliferation of mouse HT-2 cells is less than or equal to 0.05 ng/ml, corresponding to a specific activity of > 2 x 10 ⁷ units/mg |
| Endotoxin: | Endotoxin level is < 0.1 ng/µg of protein (< 1 EU/µg) |
| Storage: | Store at -80°C. |
| Stability: | Stable for at least 6 months from date of receipt under proper storage and handling conditions. |
| RefSeq: | NP_000651 |
| Locus ID: | 7040 |
| UniProt ID: | P01137 |
| RefSeq Size: | 2583 |
| Cytogenetics: | 19q13.2 |
| RefSeq ORF: | 1170 |
| Synonyms: | CED; DPD1; IBDIMDE; LAP; TGF-beta1; TGFB; TGFbeta |



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Summary:

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate a latency-associated peptide (LAP) and a mature peptide, and is found in either a latent form composed of a mature peptide homodimer, a LAP homodimer, and a latent TGF-beta binding protein, or in an active form consisting solely of the mature peptide homodimer. The mature peptide may also form heterodimers with other TGFB family members. This encoded protein regulates cell proliferation, differentiation and growth, and can modulate expression and activation of other growth factors including interferon gamma and tumor necrosis factor alpha. This gene is frequently upregulated in tumor cells, and mutations in this gene result in Camurati-Engelmann disease. [provided by RefSeq, Aug 2016]

Protein Families:

Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Transcription Factors

Protein Pathways:

Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Cytokine-cytokine receptor interaction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway, Pancreatic cancer, Pathways in cancer, Renal cell carcinoma, TGF-beta signaling pathway

Product images: