TDGF1, Human Recombinant

CATALOG #:

4335-10	10 µg
4335-50	50 µg
4335-1000	1000 µg

SYNONYMS: CRIPTO1, CRIPTO-1, CRGF, Teratocarcinoma-Derived Growth Factor 1, TDGF1, CR1.

SOURCE: Human

HOST: Human cells

PURITY: > 95 % by SDS-PAGE

MOLECULAR MASS: The secreted recombinant human TDGF1 comprises 153 amino acids with a predicted molecular mass of 17.4 kDa. As a result of glycosylation, the apparent molecular mass of rhTDGF1 is approximately 25-30 kDa in SDS-PAGE under reducing conditions.

ENDOTOXIN CONTENT: < 1.0 EU per µg protein as determined by the LAL method

FORM: Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

RECONSTITUTION: Reconstitute in sterile PBS.

STORAGE CONDITIONS: Store it under sterile conditions at -70℃ upon receiving. It is recommended to aliquot the protein into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles.

DESCRIPTION:

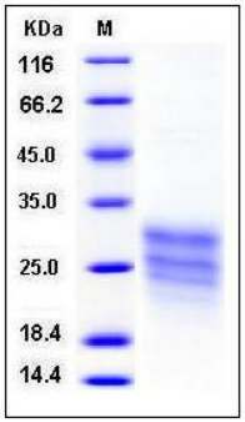
Teratocarcinoma-derived growth factor 1, also known as epidermal growth factor-like cripto protein CR1, CRGF, and TDGF1, is a cell membrane which contains one EGF-like domain. In humans, TDGF1 is highly expressed in germ cell tumors and in colon and mammary carcinomas. TDGF1 is a member of the epidermal growth factor-cripto FRL1 cryptic protein family and is involved in the activation of several different signaling pathways during embryonic development and cellular transformation. TDGF1 regulates the activation of several signaling pathways and controls cellular transformation in embryonic status. Patients with high TDGF1 expression were statistically susceptible to a recurrence of the disease, and showed poorer disease-free survival than those with low expression. TDGF1 is a predictive marker for metachronous metastasis in colorectal cancer (CRC) patients. It is preferentially expressed in gastric and colorectal carcinomas than in their normal counterparts. TDGF1 plays a role in the determination of the epiblastic cells that subsequently give rise to the mesoderm.

AMINO ACID SEQUENCE:

A DNA sequence encoding the human TDGF1 (AAH22393.1) (Met 1 - Thr 172) with a C-terminal polyhistidine tag was expressed.

BIOLOGICAL ACTIVITY:

Measured by its binding ability in a functional ELISA Immobilized human TDGF1 at 2 µg/ml (100 µl/well) can bind human ALK4 with a linear range of 0.0068 - 0.16 µg/ml.



TDGF1, Human Recombinant

RELATED PRODUCTS:

Stem Cell Research Tools
- For Embryonic Stem Cells
- For Mesenchymal Stem Cells
- For Neural Stem Cells
- StemBoost™ Growth Factor Sets

Growth Factors and Cytokines

Monoclonal and Polyclonal Antibodies

FOR RESEARCH USE ONLY! Not to be used in humans.