

Human Cripto / TDGF1 Protein (His Tag)

Catalog Number: 10908-H08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

CR, CRGF, CRIPTO, TDGF1

Protein Construction:

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

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio-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.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Leu 31

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.

Formulation:

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.

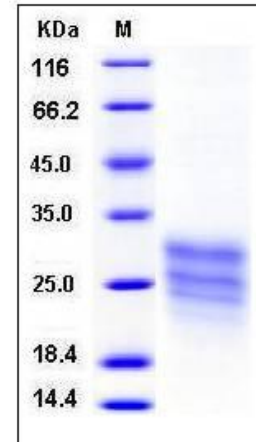
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein 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 oneEGF-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.

References

1. Liguori, G. et al., 1996, Mamm Genome. 7 (5): 344-8.
2. de la Cruz, et al., 2002, J.M.Hum Genet. 110 (5):422-8.
3. Liguori, G. et al., 1997, Mamm Genome. 8 (7): 502-5.
4. Miyoshi, N. et al., 2010, Int J Oncol. 36 (3): 563-8.

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