

Recombinant Human TDGF1 Protein(His Tag)

Catalog Number: PDMH100441

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

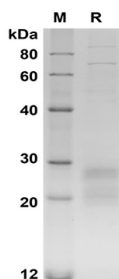
Description

Species	Human
Source	Mammalian-derived Human TDGF1 protein Leu31-Ser169, with an C-terminal His
Calculated MW	15.2 kDa
Observed MW	20-30 kDa
Accession	P13385
Bio-activity	Not validated for activity

Properties

Purity	> 85% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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 in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human TDGF1 proteins, 2µg/lane of

Recombinant Human TDGF1 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 20-30 kDa

Background

Cripto/TDGF1 is a member of the epidermal growth factor (EGF)- Cripto, Frl-1, and Cryptic (CFC) family. EGF-CFC family member proteins share a variant EGF-like motif, a conserved cysteine-rich domain, and a C-terminal hydrophobic region. Before gastrulation, Cripto is asymmetrically expressed in a proximal–distal gradient in the epiblast, and subsequently is expressed in the primitive streak and newly formed embryonic mesoderm. These proteins play key roles in intercellular signaling pathways during vertebrate embryogenesis. Mutations in Cripto/TDGF1 can cause autosomal visceral heterotaxy. Cripto/TDGF1 is involved in left-right asymmetric morphogenesis during organ development. Cripto signalling is essential for the conversion of a proximal–distal asymmetry into an orthogonal anterior–posterior axis. The mechanism of inhibitory effects of the Cripto includes both cancer cell apoptosis, activation of c-Jun-NH(2)-terminal kinase and p38 kinase signaling pathways and blocking of Akt phosphorylation. Thus, Cripto is a unique target, and Immunohistochemistry to Cripto could be of therapeutic value for human cancers.