



Recombinant Protein Technical Manual

Recombinant Rat TDGF1 Protein (Fc Tag)

RPES5147

Product Data:

Product SKU: RPES5147

Size: 10µg

Species: Rat

Expression host: HEK293 Cells

Uniprot: XP_001056317.2

Protein Information:

Molecular Mass: 41 kDa

AP Molecular Mass: 45 kDa

Tag: C-Fc

Bio-activity:

Purity: > 90 % as determined by SDS-PAGE

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

Storage: 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 sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: FGFR-4

Immunogen Information:

Sequence: Met 1-Cys 143

Background:

Cripto/TDGF1 is a member of the epidermal growth factor (EGF)- Cripto, Frl, 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.