



Recombinant Protein Technical Manual

Recombinant Human TCN2 Protein (His Tag)

RPES1973

Product Data:

Product SKU: RPES1973

Size: 20µg

Species: Human

Expression host: CHO Stable Cells

Uniprot: NP_000346.2

Protein Information:

Molecular Mass: 46.7 kDa

AP Molecular Mass: 44 kDa

Tag: C-His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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: Transcobalamin-II;D22S676;D22S750;II;TC;TC-2;TC2;TCII

Immunogen Information:

Sequence: Met 1-Trp 427

Background:

Transcobalamin II, also known as TCN2 and TC II, is a plasma protein that binds cobalamin (Cbl; vitamin B12) as it is absorbed in the terminal ileum and distributes to tissues. The circulating transcobalamin II-cobalamin complex binds to receptors on the plasma membrane of tissue cells and is then internalized by receptor-mediated endocytosis. Transcobalamin II is a non-glycosylated secretory protein of molecular mass 43 kDa. Its plasma membrane receptor (TC II-R) is a heavily glycosylated protein with a monomeric molecular mass of 62 kDa. Human TCN2 gene is composed of nine exons and eight introns spanning approximately 20 kb with multiple potential transcription start sites. A number of genetic abnormalities are characterized either by a failure to express TCN2 or by synthesis of an abnormal protein. The TCN2 deficiency results in cellular cobalamin deficiency, an early onset of megaloblastic anaemia, and neurological abnormalities.