Recombinant Protein Technical Manual

Recombinant Mouse ANGPTL3 Protein (His Tag)

RPES2198

Product Data:

Product SKU: RPES2198

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q9R182

Protein Information:

Molecular Mass: 22.7 kDa

AP Molecular Mass: 25-30 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 of PBS, pH7.4.

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

Application:

Synonyms: Angiopoietin-related Protein 3; Angiopoietin-like protein 3; Angptl3

Immunogen Information:

Sequence: Ser17-Thr206

Background:

Angiopoietin-likeProtein 3 (ANGPTL3) is a secreted glycoprotein that is structurally related to the angiopoietins. Mature mouse ANGPTL3 contains an N-terminalcoiled coil domain and a C-terminalfibrinogen-likedomain. Within the Nterminalfragment, mouse ANGPTL3 shares 83% and 92% aa sequence identity with human and rat ANGPTL3, respectively. ANGPTL3 is expressed in the liver from early in development through adulthood. ANGPTL3 directly inhibits lipoprotein lipase (LPL) and endothelial lipase (EL), enzymesresponsible for hydrolyzing circulating triglycerides and HDL phospholipids. This activity requires a putative heparin-bindingmotif which is N-terminalto thecoiled coil domain. Proteolytic removal of the fibrinogen-likedomain from the N-terminalfragment serves to activate ANGPTL3 and increase its ability toinhibit LPL in vitro and function in vivo. ANGPTL3 promotes an increase in circulating triglyceride levels without altering VLDL or HDL secretion oruptake. ANGPTL3 expression in vivo is up-regulatedby LXR agonists anddown-regulatedby insulin, leptin, and agonists of TRβ or PPARβ. ANGPTL3, secreted by fetal liver cells, also promotes the expansion of hematopoietic stem cells.