Recombinant Mouse ANGPTL3 Protein (His Tag)

Catalog Number: PKSM041360

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

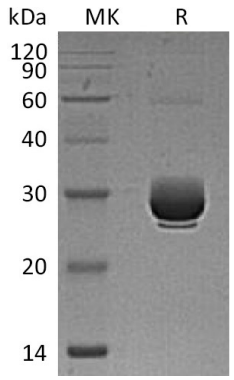
Description

Species	Mouse
Mol_Mass	22.7 kDa
Accession	Q9R182
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



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.

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