

## Recombinant Mouse ANGPTL3 Protein (His Tag)

**Catalog No.** PKSM041360

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

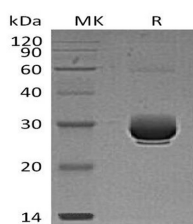
### Description

<b>Synonyms</b>	Angiopoietin-related Protein 3;Angiopoietin-like protein 3;Angptl3
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Ser17-Thr206
<b>Accession</b>	Q9R182
<b>Calculated Molecular Weight</b>	22.7 kDa
<b>Observed molecular weight</b>	25-30 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Angiopoietin-like Protein 3 (ANGPTL3) is a secreted glycoprotein that is structurally related to the angiopoietins. Mature mouse ANGPTL3 contains an N-terminal coiled coil domain and a C-terminal fibrinogen-like domain. Within the

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N-terminal fragment, 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), enzymes responsible for hydrolyzing circulating triglycerides and HDL phospholipids. This activity requires a putative heparin-binding motif which is N-terminal to the coiled coil domain. Proteolytic removal of the fibrinogen-like domain from the N-terminal fragment serves to activate ANGPTL3 and increase its ability to inhibit LPL in vitro and function in vivo. ANGPTL3 promotes an increase in circulating triglyceride levels without altering VLDL or HDL secretion or uptake. ANGPTL3 expression in vivo is up-regulated by LXR agonists and down-regulated by insulin, leptin, and agonists of TR $\beta$  or PPAR $\beta$ . ANGPTL3, secreted by fetal liver cells, also promotes the expansion of hematopoietic stem cells.