# Mouse CD90 / THY-1 Protein (His Tag)

Catalog Number: 50461-M08H



## **General Information**

### Gene Name Synonym:

CD90; T25; Thy-1; Thy-1.2; Thy1.1; Thy1.2

#### **Protein Construction:**

A DNA sequence encoding the extracellular domain of mouse THY1 (NP\_033408.1) without the propeptide (Met 1-Cys 131) was expressed, with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

**QC** Testing

Purity: > 95 % as determined by SDS-PAGE

**Endotoxin:** 

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

Stability:

Samples are stable for up to twelve months from date of receipt  $\,$  at -70  $\,$   $^{\circ}$ C

Predicted N terminal: Gln 20

### **Molecular Mass:**

The recombinant mouse THY1 consists of 123 amino acids and has a predicted molecular mass of 14.2 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rm THY1 is approximately 20-27 kDa due to glycosylation.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

### Storage:

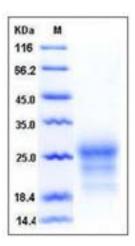
Store it under sterile conditions at -20  $^\circ\!\mathrm{C}$  to -80  $^\circ\!\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

#### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

Thy-1 membrane glycoprotein, also known as Thy-1 antigen, CD90 and THY1, is a cell membrane protein which contains 1 Ig-like V-type (immunoglobulin-like) domain. It is a glycophosphatidylinositol-linked glycoprotein expressed on the surface of neurons, thymocytes, subsets of fibroblasts, endothelial cells, mesangial cells and some hematopoietic cells. It has been identified on a variety of stem cells and at varying levels in nonlymphoid tissues such as on fibroblasts, brain cells, and activated endothelial cells. Thy-1 is evolutionarily conserved, developmentally regulated, and often has dramatic effects on cell phenotype. Thy-1 is a 25-37 kDa glycosylphosphatidylinositol (GPI)-anchored protein involved in T cell activation, neurite outgrowth, apoptosis, tumor suppression, wound healing, and fibrosis. To mediate these diverse effects, Thy-1 participates in multiple signaling cascades. Thy-1 is an important regulator of cell-cell and cell-matrix interactions, with important roles in nerve regeneration, metastasis, inflammation, and fibrosis.

### References

1.Rege TA, et al. (2006) Thy-1 as a regulator of cell-cell and cell-matrix interactions in axon regeneration, apoptosis, adhesion, migration, cancer, and fibrosis. FASEB J. 20(8): 1045-54. 2.Fiegel HC, et al. (2008) Lack of Thy1 (CD90) expression in neuroblastomas is correlated with impaired survival. Pediatr Surg Int. 24(1): 101-5. 3.Bradley JE, et al. (2009) Roles and regulation of Thy-1, a context-dependent modulator of cell phenotype. Biofactors. 35(3): 258-65.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898