

Rat CD90 / THY-1 Protein (His Tag)

Catalog Number: 80337-R08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

THY1

Protein Construction:

A DNA sequence encoding the rat THY1 (P01830) (Met1-Lys129) was expressed with a polyhistidine tag at the C-terminus.

Source: Rat

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 °C

Predicted N terminal: Gln 20

Molecular Mass:

The recombinant rat THY1 comprises 121 amino acids and predicts a molecular mass of 14.1 kDa. The apparent molecular mass of the recombinant protein is approximately 27-29 kDa in SDS-PAGE under reducing conditions 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:

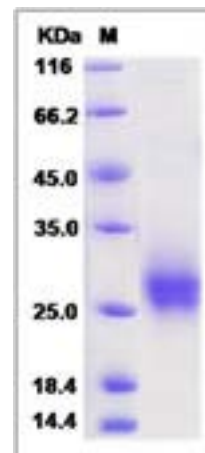
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 glycosylphosphatidylinositol-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 non-lymphoid 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.

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