

# Recombinant Human Thy-1/CD90 Protein

Catalog No.: RP03226 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	7070	P04216

### Tags

C-His

### Synonyms

Thy-1 membrane glycoprotein; CDw90;  
Thy-1 antigen; THY1; Thy-1; CD90

## Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE. > 90% by SEC-HPLC.

### Endotoxin

&lt; 1.0 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

CD90, also known as Thy1, is an approximately 25-35 kDa glycoprotein that mediates cellular adhesion and exerts wide ranging effects in different tissues. CD90 is expressed on hematopoietic progenitor cells, neurons, and activated vascular endothelial cells. Its species-specific expression in lymphoid cells allows its use as a thymocyte and pan T cell marker in mouse but not in human. CD90 can form dimers and higher order multimers. It binds to heparin, the proteoglycan Syndecan-4, and Integrins alpha M beta 2, alpha V beta 3, and alpha V beta 5. Through these interactions, CD90 inhibits neurite outgrowth, promotes astrocyte adhesion, mediates the adhesion and extravasation of leukocytes and melanoma cells, supports the Thrombospondin-1 induced disassembly of fibroblast focal adhesions, and inhibits the activation of latent TGF-beta 1, myofibroblast differentiation, and lung fibrosis. Human Thy-1 shares 63% and 66% amino acids similarity with mouse and rat homolog.

## Basic Information

### Description

Recombinant Human Thy-1/CD90 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Cys130) of human Thy-1/CD90 (Accession #NP\_006279.2) fused with His tag at the C-terminus.

### Bio-Activity

Loaded Recombinant Human Thy-1/CD90 Protein on NTA Biosensor, can bind Recombinant Human Galectin-1 Protein with an affinity constant of 46.9 nM as determined in BLI assay.

### Storage

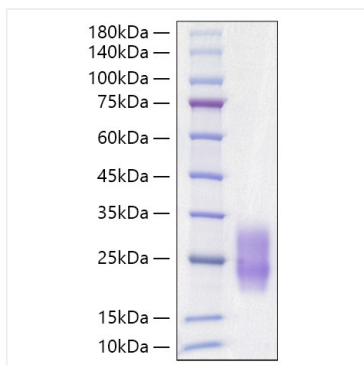
Store the lyophilized protein at -20°C to -80°C for 12 months.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

## Validation Data

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Recombinant Human Thy-1/CD90 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 20-35 kDa.