

# ProteinFind® Anti-Thy-1/CD90 Mouse Monoclonal Antibody

Please read the manual carefully before use.

Cat. No. HS903

**Storage:** PBS (pH7.4), 0.02% Sodium Azide, 50% Glycerol; at -20°C for two years, avoid repeated freeze-thawing.

## Description

Thy-1/CD90 is a GPI-anchored, developmentally regulated cell surface glycoprotein. It is involved in cell adhesion and cell communication of many cell types, especially in immune and nervous system cells. Thy-1/CD90 is widely used as a marker for hematopoietic stem cells [1]. Decreased expression of Thy1/CD90 mRNA and protein has been associated with the development of epithelial ovarian cancer, suggesting it may have a potential role of human ovarian cancer tumor suppressor genes [2]. Thy1/CD90 knockout mice have been shown to have impaired skin immune response and abnormal retinal development [3]. Thy1/CD90 is epigenetic regulated or dysregulated in some disease states such as pulmonary fibrosis, and the potentially reversible hypermethylation of the Thy1/CD90 promoter may provide new treatment options for this disease [4].

**Species Reactivity:** Human (the results of species reactivity were determined according to WB experiment).

**Clone Number:** Trans-12E8

**Antibody Isotype:** Mouse IgG1

## Immunogen

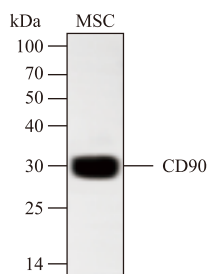
- Human CD90 extracellular region sequence (Gln20-Cys130)
- Entrez Gene ID: 7070
- UniProt ID: P04216

## Applicable Experiments and Dilution

- WB: 1:500-1:2000 dilution is recommended.

**Positive Control Cell Line:** MSC

★ **Advanced Validation:** The antibody was validated by the relative expression of protein levels in different cell lines.

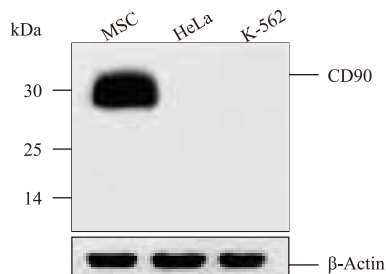


WB: ProteinFind® Anti-CD90 Mouse Monoclonal Antibody for detection of CD90 protein expression in MSC cells.

Dilution ratio of primary antibody: 1:1000

Predicted molecular weight: 25 kDa

Actual molecular weight: 30 kDa



WB: ProteinFind® Anti-CD90 Mouse Monoclonal Antibody was used to detect the expression of CD90 protein in MSC (positive cells), HeLa (negative cells) and K-562 (negative cells).

Dilution ratio of primary antibody: 1:500

Predicted molecular weight: 25 kDa

Actual molecular weight: 30 kDa



## References

- [1] Li Q, Wilkie AR, Weller M, et al. THY-1 Cell Surface Antigen (CD90) Has an Important Role in the Initial Stage of Human Cytomegalovirus Infection [J]. PLoS Pathog, 2015, 11(7): e1004999.
- [2] Abeysinghe HR, Cao Q, Xu J, et al. THY1 expression is associated with tumor suppression of human ovarian cancer [J]. Cancer Genet Cytogenet, 2003, 143(2): 125-32.
- [3] Simon PD, McConnell J, Zurakowski D, et al. Thy-1 is critical for normal retinal development [J]. Brain Res Dev Brain Res, 1999, 117(2): 219-23.
- [4] Sanders YY, Pardo A, Selman M, et al. Thy-1 promoter hypermethylation: a novel epigenetic pathogenic mechanism in pulmonary fibrosis [J]. Am J Respir Cell Mol Biol, 2008, 39(5): 610-8.

**For research use only, not for clinical diagnosis.**

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