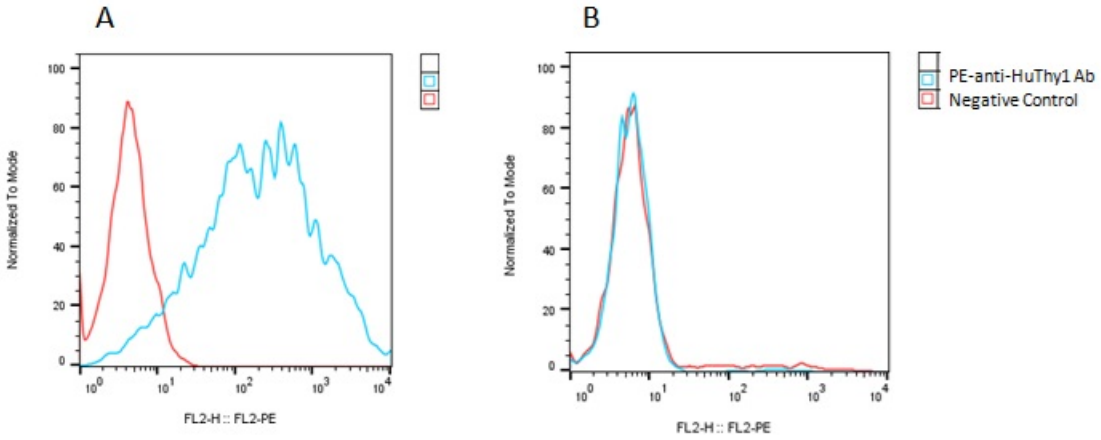
Human Thy1-CHO-K1 Stable Cell Line
Catalog Number: C3099

SPECIFICATIONS

Catalog Number	C3099
Cell Line Name	Human Thy1-CHO-K1 stable cell line
Accession Number	NM_006288.5
Host Cell	CHO-K1, Chinese hamster ovary
Quantity	Two vials of frozen cells ($2x10^6$ per vial)
Culture Medium	DMEM with 10% FBS, 4 μg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of human Thy1 expression on human Thy1-CHO-K1 stable cells (A) and CHO-K1 stable cells (B) using PE-anti-human-Thy1 Ab (Cat. #12-0909-41).



BACKGROUND

THY1 (CD90) is a glycoprotein involved in cell adhesion and signaling, primarily expressed on T lymphocytes, fibroblasts, and neurons. It plays a key role in immune responses, tissue repair, and stem cell regulation. THY1 is essential for cell-cell adhesion, migration, and signal transduction, contributing to T cell activation, stem cell differentiation, and tissue regeneration, as well as modulating processes like survival and apoptosis. It is expressed in various tissues, including T cells, fibroblasts, neurons, and mesenchymal stem cells, where it is crucial for self-renewal. Thy-1 expression is dysregulated in several cancers. It is often overexpressed in certain tumors, such as gliomas, melanomas, and some leukemias, while downregulated in others, including prostate and breast cancers. Its role in cancer progression is context-dependent, influencing tumor growth, metastasis, and angiogenesis. Thy-1 is being explored as a potential therapeutic target due to its involvement in cancer progression and immune modulation. Targeting Thy-1 could inhibit tumor growth, enhance immune responses, or modulate fibrosis in diseases like idiopathic pulmonary fibrosis.

References

Sauzay C, Voutetakis K, Chatziioannou A, Chevet E, Avril T. CD90/Thy-1, a Cancer-Associated Cell Surface Signaling Molecule. Front Cell Dev Biol. **7**:66. 2019.

Kumar A, Bhanja A, Bhattacharyya J, Jaganathan BG. Multiple roles of CD90 in cancer. Tumour Biol. 37 **9**:11611-11622. 2016.

Lobba ARM, Carreira ACO, Cerqueira OLD, Fujita A, DeOcesano-Pereira C, Osorio CAB, Soares FA, Rameshwar P, Sogayar MC. High CD90 (THY-1) expression positively correlates with cell transformation and worse prognosis in basal-like breast cancer tumors. PLoS One. 13 **6**:e0199254. 2018.

www.accurusbio.com | 2600 Hilltop Drive, BLDG B, C337, Richmond, CA 94806, USA
| info@accurusbio.com | phone (510) 872-2111