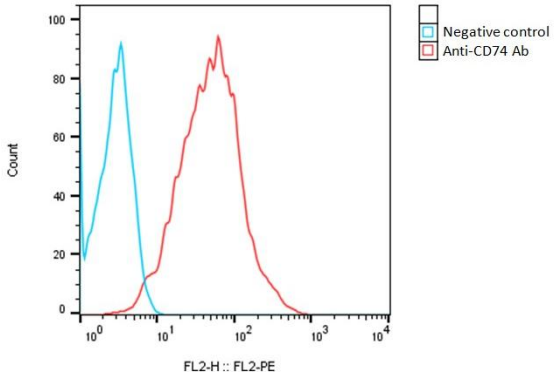
Human CD74-CHO-K1 Stable Cell Line
Catalog Number: C3067

SPECIFICATIONS

Catalog Number	C3067
Cell Line Name	Human CD74-CHO-K1 stable cell line
Accession Number	NP_004346.1
Host Cell	Adherent CHO-K1
Quantity	Two vials of frozen cells ($2x10^6$ per vial)
Culture Medium	DMEM with 10% FBS, 4μg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of human CD74 expression on human CD74-CHO-K1 stable cells using a monoclonal antibody specific for human CD74 (BioLegend, Cat. #326807)



BACKGROUND

CD74 is a transmembrane glycoprotein expression in immune-related cells and tissues, such as B cells, dendritic cells, macrophages, and thymic epithelial cells. CD74 plays a pivotal role in the immune system's adaptive response by regulating the trafficking and presentation of antigens. CD74 initially binds to newly synthesized MHC-II molecules, ensuring that MHC-II molecules are loaded with exogenous antigens before surface expression on antigen-presenting cells (APCs). CD74 directs MHC-II molecules to lysosomes for antigen processing and peptide loading maintaining the integrity of the MHC-II antigen presentation pathway. CD74 can activate signaling pathways in response to antigen binding, leading to immune cell activation, cytokine production, and other immune responses. Overexpression of CD74 has been associated with certain cancers like Hodgkin lymphoma, B-cell chronic lymphocytic leukemia, and pancreatic cancer. Therefore, CD74's overexpression and role in antigen presentation makes it a good candidate as a potential therapeutic by targeting CD74 activity or disrupting its interaction with MHC-II.

References

Lee, J. H., Kang, S. G., Kim, J. S., et al. Targeting CD74 in multiple myeloma: a new therapeutic approach. *Journal of Immunology Research*, 2015, 698451. 2013.

Su H, Na N, Zhang X, Zhao Y. The biological function and significance of CD74 in immune diseases. *Inflamm Res*. **66(3)**:209-216. 2017.

David K, Friedlander G, Pellegrino B, et al. CD74 as a regulator of transcription in normal B cells. *Cell Rep*. **41(5):**111572.2022.

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