

Human ILT4-CHO-K1 Stable Cell Line

Catalog Number: C3024

SPECIFICATIONS

Catalog Number C3024

Cell Line Name Human ILT4-CHO-K1 stable cell line

Accession Number AAH36827.1 Host Cell Adherent CHO-K1

 Quantity
 Two vials of frozen cells (2x10⁶ per vial)

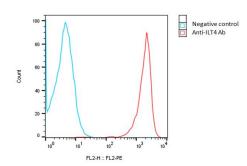
 Culture Medium
 DMEM with 10% FBS, 10 μg/ml puromycin

Freezing Medium 90% FBS and 10% DMSO

Storage Liquid nitrogen

DATA

Detection of human ILT4 expression on human ILT4-CHO-K1 stable cells using a monoclonal antibody specific for human ILT4 (BioLegend, Cat #338705)



BACKGROUND

Immunoglobulin-like transcript 4 (ILT4) is as an immunosuppressive molecule predominantly expressed in myeloid cells, including monocytes, macrophages, dendritic cells and granulocytes. ILT4 behaves as an inhibitory checkpoint in the immune system for monocytes and DCs by restraining signal activation. ILT4 activity can be significantly induced by environmental influence such as inflammatory cytokines, interactions with Treg and mesenchymal cells, and Toll-like receptor (TLR) signaling. Excessive ILT4 activity shows to play a role in tumor progression given its involvement in immune regulation. Recent studies have shown that ILT4 is enriched in both tumor cells and stroma cells of certain types of cancers including leukemia, non-small cell lung cancer (NSCLC), breast cancer, esophageal carcinoma and pancreatic cancer suggesting that ILT4 may modulate the microenvironment in favor of tumor progression. Given its link to immune regulation and tumor pathogenesis, ILT4 serves as a critical target for immunotherapy research and discovery.

References

Gao A, Sun Y, Peng G. ILT4 functions as a potential checkpoint molecule for tumor immunotherapy. Biochim Biophys Acta Rev Cancer. 1869(2):278-285. 2018.

Gao A, Liu X, Lin W, et al. Tumor-derived ILT4 induces T cell senescence and suppresses tumor immunity. J Immunother Cancer. 9(3):e001536. 2021.