

Human CCR4-CHO-K1 Stable Cell Line

Catalog Number: C3026

SPECIFICATIONS

Catalog Number C3026

Cell Line NameHuman CCR4-CHO-K1 stable cell lineAccession NumberFull length human CCR4 (NM_005508.5)

Host Cell Adherent CHO-K1

 Quantity
 Two vials of frozen cells $(1x10^6 \text{ per vial})$

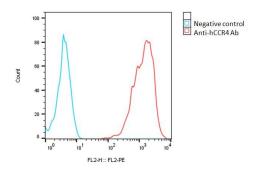
 Culture Medium
 DMEM with 10% FBS, $4\mu\text{g/ml}$ puromycin

Freezing Medium 90% FBS and 10% DMSO

Storage Liquid nitrogen

DATA

Detection of human CCR4 expression on CHO-K1 cells using a PE-anti human CCR4 antibody (BioLegend, Cat #359411)



BACKGROUND

CCR4, or CC chemokine receptor 4, is a G protein-coupled receptor (GPCR) that plays a crucial role in the immune system by mediating the effects of chemokines and triggering intracellular signaling pathways that influence the behavior of immune cells. The primary function of CCR4 is to regulate the migration of immune cells, particularly T lymphocytes, towards sites of inflammation or infection. This receptor is involved in the homing of T cells to specific tissues and plays a role in immune surveillance. CCR4 is expressed in various tissues, including the skin, lungs, and lymphoid organs. Its expression is particularly notable on certain subsets of T cells, such as regulatory T cells (Tregs) and Th2 cells. CCR4 expression is often found to be dysregulated in certain cancers. For example, it has been reported to be overexpressed in some hematological malignancies, including adult T-cell leukemia/lymphoma (ATLL) and cutaneous T-cell lymphoma (CTCL). The aberrant expression of CCR4 in cancer is associated with increased recruitment of T cells to the tumor microenvironment. Due to its involvement in immune cell trafficking and its dysregulation in certain cancers, CCR4 has emerged as a potential therapeutic target and may help modulate the immune response and inhibit the migration of T cells to the tumor, thereby impacting tumor growth.

References

Imai T, Baba M, Nishimura M, Kakizaki M, Takagi S, Yoshie O. The T cell-directed CC chemokine TARC is a highly specific biological ligand for CC chemokine receptor 4. *J Biol Chem.* 272(23):15036-15042. 1997.

Ishida T, Utsunomiya A, Iida S, et al. Clinical significance of CCR4 expression in adult T-cell leukemia/lymphoma: its close association with skin involvement and unfavorable outcome. Clin Cancer Res. 9(10 Pt 1):3625-3634. 2003.

Ferenczi K, Fuhlbrigge RC, Pinkus J, Pinkus GS, Kupper TS. Increased CCR4 expression in cutaneous T cell lymphoma. J Invest Dermatol. 119(6):1405-1410. 2002.