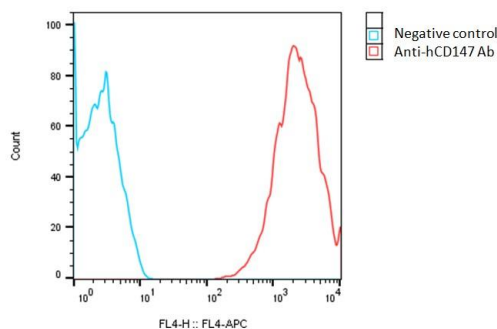


SPECIFICATIONS

Catalog Number	C3089
Cell Line Name	Human CD147-CHO-K1 stable cell line
Accession Number	NM_001728.4
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 CD147 expression on human CD147-CHO-K1 stable cells using a monoclonal antibody specific for human CD147 (BioLegend, Cat. #306209)


BACKGROUND

CD147 (Basigin/EMMPRIN) is a glycoprotein of the immunoglobulin superfamily that plays diverse roles in cell biology, from cell adhesion to immune response regulation. CD147 is well-known for its role in inducing the expression of matrix metalloproteinase (MMPs), which degrade the extracellular matrix (ECM). This makes it crucial in tissue remodeling, wound healing, and cancer metastasis. It mediates interactions between cells and the extracellular matrix and plays a role in leukocyte migration during immune responses. CD147 regulates the expression of monocarboxylate transporters (MCTs), particularly MCT1 and MCT4, which are involved in lactate transport, especially under hypoxic conditions in tumor cells. CD147 is expressed across various tissues and found in high concentrations in the epithelial and endothelial cells, leukocytes, and neurons and is upregulated in conditions of low oxygen, especially in tissues that require rapid adaptation to stress, such as in tumors and ischemic tissues. CD147 is often overexpressed in various cancers, including breast, lung, liver, colorectal, and melanoma. Its role in promoting MMP secretion facilitates ECM breakdown, enhancing tumor invasion, angiogenesis, and metastasis. Given its role in promoting metastasis and cancer metabolism, CD147 is a promising therapeutic target.

References

- Landras A, Reger de Moura C, Jouenne F, Lebbe C, Menashi S, Mourah S. CD147 Is a Promising Target of Tumor Progression and a Prognostic Biomarker. *Cancers (Basel)*. **11(11)**:1803. 2019.
- Nyalali AMK, Leonard AU, Xu Y, et al. CD147: an integral and potential molecule to abrogate hallmarks of cancer. *Front Oncol*. **13**:1238051. 2023.
- Kanekura T. CD147/Basigin Is Involved in the Development of Malignant Tumors and T-Cell-Mediated Immunological Disorders via Regulation of Glycolysis. *Int J Mol Sci*. **24(24)**:17344. 2023.

Disclaimer: For research use only. Not for use in humans.