

SPECIFICATIONS

Catalog Number	C3075
Cell Line Name	Mouse EpCAM-SK-OV-3 stable cell line
Accession Number	NP_032558.2
Host Cell	Human SK-OV-3 (Ovarian Adenocarcinoma)
Quantity	Two vials of frozen cells $(1x10^6 \text{ per vial})$
Culture Medium	McCoy's 5A with 10% FBS, 2µg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of mouse EpCAM expression on mEpCAM-SK-OV-3 stable cells using a PE-anti-mEpCAM antibody (BioLegend, Cat. #329907)



BACKGROUND

EpCAM, short for Epithelial Cell Adhesion Molecule, is a transmembrane protein, with an extracellular domain involved in cell-cell adhesion and intracellular domains participating in signal transduction. It's expressed in epithelial tissues throughout the body including the linings of organs like skin, intestines, liver, pancreas and various glands. In homophilic cell-cell adhesion, it binds to other EpCAM molecules on neighboring cells facilitating cell-cell interactions to help maintain tissue integrity, embryonic development, and tissue regeneration. EpCAM is known to regulate various signaling pathways, including the Wnt signaling pathway, which is crucial for cell proliferation and differentiation. EpCAM has garnered significant attention in cancer research due to its overexpression in various malignancies. It's overexpression in many cancers, including colorectal, breast, ovarian, pancreatic, and lung cancers is often associated with increased tumor aggressiveness, metastasis, and resistance to therapy. Therefore, EpCAM serves as a valuable biomarker for the diagnosis and prognosis of certain cancers.

References

Huang L, Yang Y, Yang F, et al. Functions of EpCAM in physiological processes and diseases (Review). Int J Mol Med. 42(4):1771-1785. 2018.

Eyvazi S, Farajnia S, Dastmalchi S, Kanipour F, Zarredar H, Bandehpour M. Antibody Based EpCAM Targeted Therapy of Cancer, Review and Update. *Curr Cancer Drug Targets*. **18**(9):857-868. 2018.