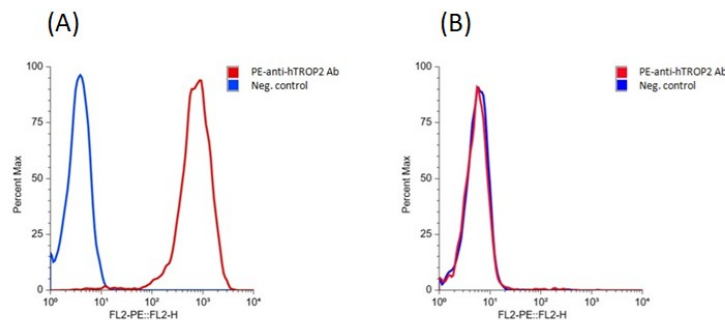


SPECIFICATIONS

Catalog Number	C3118
Cell Line Name	Human TROP2-EMT6 stable cell line
Accession Number	NM_002353.3
Host Cell	EMT6
Quantity	Two vials of frozen cells (2x10 ⁶ per vial)
Culture Medium	DMEM with 10% FBS, 2 µg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of human TROP2 expression on human TROP2-EMT6 stable cells (A) or the parental EMT6 cells (B) using a monoclonal antibody specific for human TROP2 (BioLegend, #363803).



THAWING AND CULTURING

- Remove the cell vial from liquid nitrogen tank and thaw cells quickly in a 37°C water bath
- Transfer the cells to a 15 ml centrifuge tube and slowly add 5 ml of pre-warmed complete growth medium
- Centrifuge the cells at 200x g for 5 min
- Remove the supernatant
- Resuspend cell pellet with 7 ml of complete growth medium and transfer cells to a T25 flask
- Incubate cells in an incubator with 5% CO₂ at 37°C
- Split the cells twice a week or as needed.

BACKGROUND

TROP2, also known as TACSTD2 (tumor-associated calcium signal transducer 2), is a transmembrane glycoprotein that plays a significant role in cell adhesion, proliferation, and signal transduction. It acts as a cell surface receptor and is involved in diverse cellular processes such as cell growth, differentiation, and migration. TROP2 is also associated with epithelial-mesenchymal transition (EMT), a process involved in embryonic development and tumor metastasis. In terms of tissue expression, TROP2 is predominantly found in epithelial tissues. It is expressed in various organs, including the lung, breast, colon, pancreas, prostate, and ovary. TROP2 expression is particularly high in epithelial cells lining the gastrointestinal tract and the ducts of different glands. TROP2 has gained significant attention in the field of cancer research due to its dysregulation in various malignancies. Elevated TROP2 expression has been observed in several cancer types and has been associated with tumor progression, invasion, and poor prognosis. As a result, TROP2 has emerged as a potential therapeutic target for anticancer interventions.

References

- Cubas R, Li M, Chen C, Yao Q. Trop2: a possible therapeutic target for late stage epithelial carcinomas. *Biochim Biophys Acta*. 1796:309-314. 2009.
- Wang J, Day R, Dong Y, Weintraub SJ, Michel L. Identification of Trop-2 as an oncogene and an attractive therapeutic target in colon cancers. *Mol Cancer Ther*. 7:280-285. 2008.

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