

Human CLDN 18.2-KATOIII Stable Cell Line

Catalog Number: C3016

SPECIFICATIONS

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Cell Line Name Human CLDN18.2-KATOIII stable cell line

Accession Number NP 001002026.1

Host Cell KATO III (Semi-adherent)

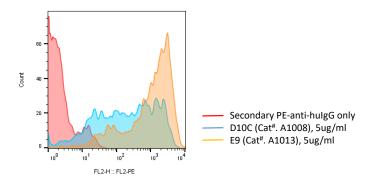
QuantityTwo vials of frozen cells $(1x10^6 \text{ per vial})$ Culture MediumDMEM with 10% FBS, 0.125 μ g/ml puromycin

Freezing Medium 90% FBS and 10% DMSO

Storage Liquid nitrogen

DATA

Detection of human CLDN18.2 expression on human CLDN18.2-KATO III cells (Cat. #C3016) using recombinant anti-huCLDN18.2 mAbs D10C (Cat. #A1008) and E9 (Cat. #A1013), followed by staining with a secondary PE-anti-human IgG antibody



BACKGROUND

Claudin-18 (CLDN18) is a member of a large family of four-span transmembrane proteins called Claudins. These proteins are the essential components of the mammalian tight junctions (TJs) in epithelial cells. Claudin-18 has two splice variants, 18.1 and 18.2. While CLDN18.1 is specifically expressed in the lung tissue, CLDN18.2 expression in normal tissue is more restricted and is only detected in small patches of stomach mucosal. CLDN18.2 expression is elevated in many types of epithelial cancers including stomach, esophagus, pancreatic and ovarian cancers. The expression of CLDN18.2 is not only detected in primary tumors, but also in the metastatic sites. Therefore, CLDN18.2 is an ideal target for monoclonal antibody-based cancer therapies.

References

Türeci O. *et al.* Claudin-18 gene structure, regulation, and expression is evolutionary conserved in mammals. *Gene.* **481(2):** 83-92. 2011. Sahin U. *et al.* Claudin-18 Splice Variant 2 Is a Pan-Cancer Target Suitable for Therapeutic Antibody Development. *Clin. Cancer Res.* **14(23):**7624-7634. 2008. Niimi T. *et al.* Claudin-18, a Novel Downstream Target Gene for the T/EBP/NKX2.1 Homeodomain Transcription Factor, Encodes Lung- and Stomach-Specific Isoforms through Alternative Splicing. *Mol. Cell. Biol.* **21(21):** 7380-7390. 2001.