

Anti-human CLDN18.2 mIgG2b

Catalog Number: A1031

SPECIFICATIONS

Catalog Number A1031

Product Name Anti-human CLDN18.2

Source Purified mouse antibody from hybridoma

Clone Number T158S2
Species Reactivity Human
Isotype Mouse IgG2b
Formulation 1xPBS,pH6.9. Sterile

Stability & Storage 1 month at 4°C; 12 months at <-20°C; Avoid repeated freeze-thaw

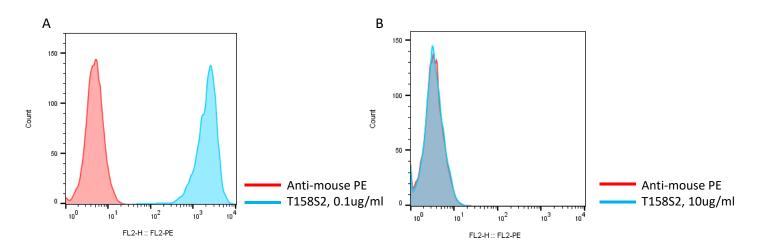
Purity >95%

Protein Aggregation Not obvious on SDS-PAGE

Application Flow cytometry, ELISA, cell-based assay

DATA

A) Detection of human CLDN18.2 expression on human CLDN18.2-CHO-K1 stable cell line (Cat. #C3011) using the anti-human CLDN18.2 mlgG2b(Cat. #A1031). B) FACS staining of control vector transfected CHO-K1 cells with the anti-human CLDN18.2 mlgG2b(Cat. #A1031).



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.