

Human CLDN18.1-FLAG-CHO-S Stable Cells

PRODUCT INFORMATION

Catalog Number	C1017
Cell Line Name	Chinese hamster ovary (CHO) suspension cell pool expressing full-length human CLDN18.1
Gene Synonyms	CLDN18.1
Gene Sequence	Codon optimized from Accession [#] NP_057453 with a FLAG tag (ADYKDDDK) inserted between V144 and T145.
Protein Structure	Four span-transmembrane receptor
Host Cell	Suspension CHO
Quantity	Two vials of frozen cells (20x10 ⁶ per vial)
Stability	>10 passages
Culture Medium	50% CD-CHO (Gibco [#] 10743-029), 50% Ex-Cell CHO 5 Media (Sigma [#] C0363), supplemented with 8 mM L-Glutamine, 1x HT (Gibco [#] 11067030), 1x Penicillin-Streptomycin, and 10 µg/ml Puromycin.
Freezing Medium	Culture medium with 10% DMSO
Storage	Liquid nitrogen immediately upon receipt
Mycoplasma Test	Negative
Applications	Antibody binding assays, IHC/Western blot analysis, or use as cell immunogen

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, CLDN18.1 and CLDN18.2. 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

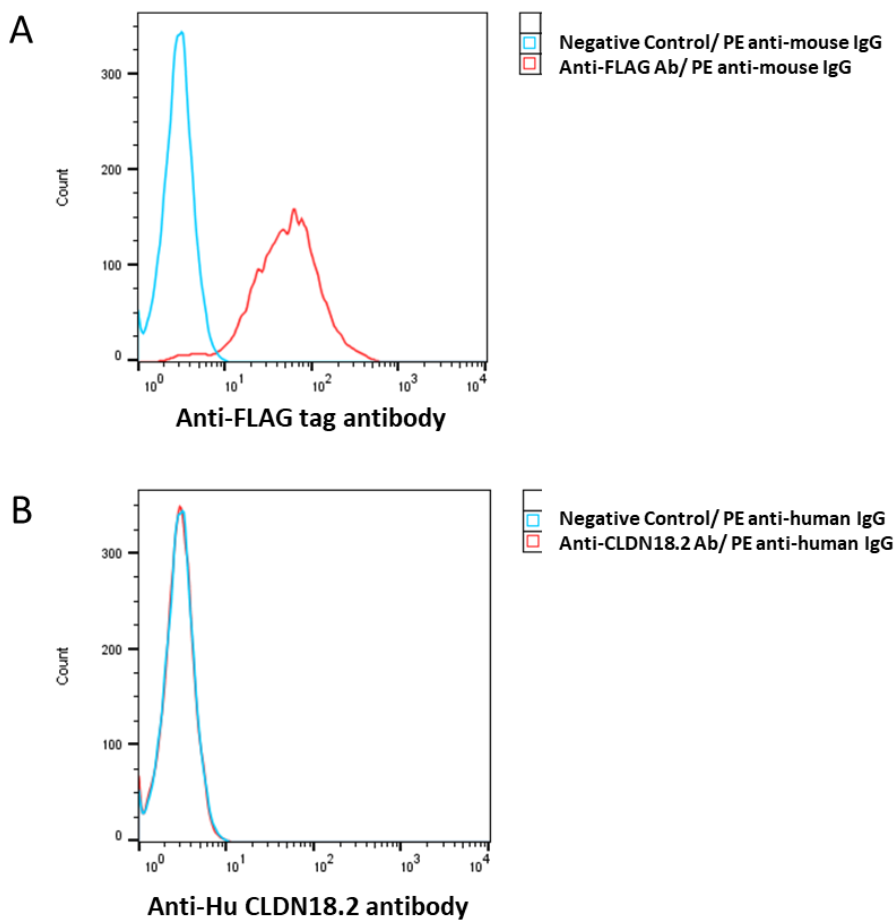
Disclaimer For research use only. Not for use in humans.

Human CLDN18.1-FLAG-CHO-S Stable Cells

tumors, but also in the metastatic sites. Therefore, CLDN18.2 is an ideal target for monoclonal antibody-based cancer therapies.

REPRESENTATIVE DATA

- A. Detection of human CLDN18.1-FLAG expression on Human CLDN18.1-FLAG-CHO-S cells using a mouse monoclonal antibody specific for the FLAG tag (DYKDDDK), followed by staining with the PE-anti-mouse IgG.
- B. Detection of human CLDN18.2 expression on Human CLDN18.1-FLAG-CHO-S cells using a human monoclonal antibody specific for human CLDN18.2, followed by staining with the PE-anti-human IgG. No CLDN18.2 is detected on the cells.



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



Human CLDN18.1-FLAG-CHO-S Stable Cells

REFERENCES

Türeci O. et al. (2011) "Claudin-18 gene structure, regulation, and expression is evolutionary conserved in mammals". *Gene*, 481(2), p83-92.

Sahin U. *et al.* (2008) "Claudin-18 Splice Variant 2 Is a Pan-Cancer Target Suitable for Therapeutic Antibody Development". *Clin. Cancer Res.* 14 (23) p7624-7634.

Niimi T. *et al.* (2001) "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), p7380-7390.