

Anti-Occludin [67-2] Bulk Size Ab04038-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a reformatted human IgG1 Fc Silent Fc Silent™ antibody, based on the original human IgG1 format, created for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Lambda

Clone Number: 67-2

Alternative Name(s) of Target: OCLN

UniProt Accession Number of Target Protein: Q16625

Published Application(s): immunoblot, in vitro, inhibition, ELISA, IF

Published Species Reactivity: Human, Mouse

Immunogen: The original antibody was generated by immunizing mice with KLH-coupled, modified hOCLN-EC2 peptide. The modification made to the hOCLN-EC2 peptide was an added cysteine residue was at the N-terminal end.

Specificity: This antibody is specific for the peptide ALCNQFYTPAATGLYVD, which is part of the second extracellular loop (EL2) of human OCLN (aa 214-230). However, it has also been shown to bind mouse OCLN, strongly suggesting that it does not recognize the human-specific amino acids in OCLN-EC2.

Application Notes: The original format of this antibody (mouse IgG1) can bind hOCLN, as was determined by ELISA during initial hybridoma screening. This antibody efficiently inhibited HCV infection in the HCV-permissive human cell line Huh7.5.1. This antibody can access OCLN from the basolateral side of hepatocytes but not from the apical side using three different culture systems of Huh7.5.1 cells. This antibody was shown to cross-react with mouse OCLN in a WB. This antibody showed no adverse effects on cell viability or the barrier function of tight junctions (Okai et al., 2018; PMID: 29682171).

Antibody First Published in: Okai et al. A novel occludin-targeting monoclonal antibody prevents hepatitis C virus infection in vitro Oncotarget. 2018 Mar 30;9(24):16588-16598. doi: 10.18632/oncotarget.24742. [PMID:29682171](#)

Note on publication: The original publication discusses the development of an anti-human occludin (hOCLN) monoclonal antibody (mAb) 67-2 and its potential as a target for preventing and treating HCV infection.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.