

Anti-CD81 [CD81K04] Standard Size Ab01122-10.3

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

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

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

Clone Number: CD81K04

Alternative Name(s) of Target: TSPAN-28; K04; 26 kDa cell surface protein TAPA-1; Target of the antiproliferative antibody 1; Tetraspanin-28; Tspan-28

UniProt Accession Number of Target Protein: P60033

Published Application(s): crystallisation, Neutralisation, FC

Published Species Reactivity: Human

Immunogen: This antibody was raised by immunising BALB/c and Naval Medical Research Institute (NMRI) mice with CD81 extracellular loop 2 (ECL2) protein or with CHO-CD81 cells.

Specificity: This antibody is specific for a conformational epitope in the extracellular domain of human CD81, a receptor used by hepatitis C virus to infect human hepatocytes.

Application Notes: This antibody has been identified as a potential anti-hepatitis C virus (HCV) agent (Ji et al, 2015). It displays potent and broad-spectrum inhibition of HCV entry in vitro, and has been shown to both prevent HCV infection and limit HCV spread in mice models (Ji et al, 2015) by blocking viral engagement of CD81. The binding specificity of this antibody has been confirmed in FACS analysis (Ji et al, 2015). A Fab fragment of this antibody has been used to determine the crystal structure of CD81K04 binding to the large extracellular loop of CD81 (Bujotzek et al, 2016).

Antibody First Published in: Ji et al Prevention of hepatitis C virus infection and spread in human liver chimeric mice by an anti-CD81 monoclonal antibody Hepatology. 2015. 61(4):1136-44 [PMID:25417967](#)

Note on publication: Describes the original generation of this antibody, and its characterisation.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In:

PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. 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.