ARG22960
anti-CD81 antibody [Eat2]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Hamster Monoclonal antibody [Eat2] recognizes CD81 Hamster anti Mouse CD81 antibody, clone Eat2 recognizes mouse and rat CD81, also known as TAPA-1 or Target of the antiproliferative antibody 1. CD81 is a 236 amino acid ~26 kDa multipass transmembrane protein belonging to the TM4SF family (UniProt: P35762). In rodents CD81 is expressed at much higher levels on resting B cells than on T cells, although increased expression on T cells is found following activation. Hamster anti Mouse CD81 antibody, clone Eat2 induces homotypic aggregation of B cells and inhibits anti Ig and IL-4 induced proliferation (Maecker et al. 2000). Eat 2 requires the presence of both extracellular loops of TAPA-1 for binding.Mice lacking CD81 demonstrate reduced fertility through impaired oocyte-sperm fusion, double knockout CD81-/- CD9-/- mice are completely infertile suggesting complimentary roles in oocyte-sperm fusion (Rubenstein et al. 2006).
Tested Reactivity	Ms, Rat
Tested Application	ELISA, FACS, IHC-Fr, IP, WB
Host	Hamster
Clonality	Monoclonal
Clone	Eat2
Isotype	IgG1
Target Name	CD81
Species	Mouse
Immunogen	38C13, murine B cell line.
Conjugation	Un-conjugated
Alternate Names	CD antigen CD81; TAPA1; Tspan-28; S5.7; CD81 antigen; Target of the antiproliferative antibody 1; Tetraspanin-28; 26 kDa cell surface protein TAPA-1; CVID6; TSPAN28

Application Instructions

Application table

Application	Dilution
ELISA	Assay-dependent
FACS	1:10 - 1:50
IHC-Fr	Assay-dependent
IP	Assay-dependent
WB	Assay-dependent (for non-reducing conditions)

Application Note

IHC-Fr: The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Arigo recommends the use of acetone fixation for frozen sections.
WB: Clone Eat2 recognizes mouse CD81 under non-reducing conditions.
FACS: Use 10 µl of the suggested working dilution to label 10^6 cells in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	Cd81
Gene Full Name	CD81 antigen
Background	The protein encoded by this gene is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. Most of these members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. This encoded protein is a cell surface glycoprotein that is known to complex with integrins. This protein appears to promote muscle cell fusion and support myotube maintenance. Also it may be involved in signal transduction. This gene is localized in the tumor-suppressor gene region and thus it is a candidate gene for malignancies. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]
Function	May play an important role in the regulation of lymphoma cell growth. Interacts with a 16-kDa Leu-13 protein to form a complex possibly involved in signal transduction. May act as the viral receptor for HCV. [UniProt]
Highlight	Related products: CD81 antibodies; Anti-Hamster IgG secondary antibodies; Related news: New antibodies for exosome isolation
Calculated Mw	26 kDa
PTM	Not glycosylated.