anti-mouse CD81 (TAPA-1)

Monoclonal Antibody Eat2 to CD81 (Mouse)

Cat-No: **22150810** 100 µg in 100 µl

Clone: Eat2

Specificity: The antibody reacts with the extracellular loops of murine CD81 (TAPA-1) molecule. As a member of the tetraspanin superfamily of cell-surface proteins, CD81 has been linked to the control of cell proliferation, adhesion and motility. CD81 is expressed in higher levels on resting murine B cells than on resting T cells and is functionally active on B cells as it induces homotypic adhesion of B lymphocytes. Unlike human CD81, which is expressed equally on all thymocytes, murine CD81 is upregulated on $CD4^{+}CD8^{+}$ thymocytes, then down-regulated again on mature single-positive thymocytes. Murine dendritic cells, splenic macrophages and NK cells all express very high levels of CD81. CD81 has also been involved in the induction of IL-4 secretion from T cells during Th2 immune responses. It has been reported that CD81 expression can also be induced in mature T cells upon activation. This anti-CD81 mAb has been shown to decrease the proliferation of LPS stimulated $CD81^{+/+}$ B cells to levels similar to that of $CD81^{-/-}$ B cells.

Isotype subclass: Hamster IgG

Form: Purified

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing no additives (pH 7.2).

Expiration date: The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Store at 4 °C. For long term storage, aliquot and store at -20°C.
Avoid repeated freeze/thaw cycles.

Application: functional application

References:
1. Maecker, H. T.,et al., 2000. Hybridoma 19:15-22.
2. Maecker, H. T.,Todd, S. C., and Levy, S, 1997. Faseb J 11:428-442.
3. Miyazaki, T., Muller, U. and Campbell, K. S., 1997. Embo J 16:4217-4225.

Background: CD81 (TAPA-1), a member of the tetraspanin family, is expressed on virtually all nucleated cells, but above all on germinal center B cells. CD81 forms complexes with other tetraspanin proteins, integrins, coreceptors, MHC class I and II molecules, and influences adhesion, morphology, activation, proliferation and differentiation of B, T and other cells – e.g. in muscles CD81 promotes cell fusion and myotube maintenance. CD81 has been also identified as a receptor for the hepatitis C virus.

ImmunoTools **Excellent Quality - Advantageously priced**
Gladiolenweg 2; 26169 Friesoythe; Germany
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com