# **Technical Data Sheet**

# Purified NA/LE Hamster Anti-Mouse/Rat CD81

### **Product Information**

Material Number:
Alternate Name:
Size:
Concentration:
Clone:
Isotype:
Reactivity:
Storage Buffer:

**562240** Tspan28; Tapa1; Tapa-1; Target of the antiproliferative antibody 1; Trpm5 0.5 mg 1.0 mg/ml Eat2 Armenian Hamster IgG1,  $\kappa$ QC Testing: Mouse and Rat No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2µm sterile filtered. Endotoxin level is  $\leq 0.01$  EU/µg ( $\leq 0.001$  ng/µg) of protein as determined by the LAL assay.

# Description

The Eat2 monoclonal antibody specifically binds to CD81, a 26-kDa nonglycosylated member of the transmembrane 4 integral membrane protein superfamily, expressed by many types of cells. For example, CD81 participates with CD19 and CD21 in the signal transduction complex associated with the B-cell receptor on human B lymphocytes and with the CD4 and CD8 co-receptors on human thymocytes and T lymphocytes. In mouse fetal thymic organ culture, interactions of immature thymocytes with CD81 expressed by thymic stromal cells are required to induce development of T cells with  $\alpha\beta$  T-cell receptors. Furthermore, CD81 has been shown to play a role in the regulation of rat mastcell degranulation. Despite its important roles in the immune response and wide tissue distribution, CD81-deficient mice are born without obvious developmental abnormalities. However, these mice have abnormal immune responses, and impaired fertility. Eat2 mAb cross-reacts with the rat CD81 antigen.

## **Preparation and Storage**

#### Store undiluted at 4°C.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

#### **Application Notes**

Application					
Flow cytometry Routinely Tested					
Suggested Compa	anion Products				
Catalog Number	Name	Size	Clone	_	
553968	Purified NA/LE Hamster IgG1 K Isotype Control	0.5 mg	A19-3	-	
554656	Stain Buffer (FBS)	500 ml	(none)		
<ol> <li>Since application</li> <li>Please refer to www.</li> </ol>	s vary, each investigator should titrate the reagent to obtain optimal result ww.bdbiosciences.com/pharmingen/protocols for technical protocols.	S.			
References Boismenu R, Rhein M, Fis Deng J, Yeung VP, Tsitoui 165(9):5054-5061. (Biolog Fleming TJ, Donnadieu E, 186(8):1307-1314. (Biolog Levy S, Todd SC, Maecke 16:89-109. (Biology)	cher WH, Havran WL. A role for CD81 in early T cell development. <i>Science</i> . 1996; 27 ra D, DeKruyff RH, Umetsu DT, Levy S. Allergen-induced airway hyperreactivity is din y) Song CH, Laethem FV, Galli SJ, Kinet JP. Negative regulation of Fc epsilon RI-media y) r HT. CD81 (TAPA-1): a molecule involved in signal transduction and cell adhesion in	71(5246):198-200. (Biology) ninished in CD81-deficient mice. <i>J</i> ated degranulation by CD81. <i>J Exp</i> the immune system. <i>Annu Rev In</i>	Immunol. 2000; 9 Med. 1997; 9 munol. 1998;		

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reduction of B-1 cells in CD81-deficient mice. Proc Natl Acad Sci U S A. 1997; 94(20):10844-10849. (Biology)

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