

KO572 For research use only

## Anti Mouse Fca/µR Monoclonal Antibody

Clone No. TX61

This antibody was prepared by Dr. Akira Shibuya, Tsukuba University.

 Code No.
 KO572

 Terget
 Fcα/μR

 Category
 Immunology

 Gene ID
 64435

Primary Source MGI:1927803

Synonyms MGC129330; MGC129331; Fcamr

Type Monoclonal Antibody

**Immunogen** Mouse Fcα/μR expressing cell line

Raised in Fcα/μR deficient mouse

MyelomaSp2/0Clone numberTX61PurificationProteinG

Source Serum-free medium

IsotypeIgG1,κCross ReactivityHumanLabelUnlabeledConcentration0.25 mg/mL

Contents (Volume) 50 µg (200 µL/vial)

**Buffer** PBS [containing 2% Block Ace as a stabilizer, 0.1% Proclin

as a bacteriostat]

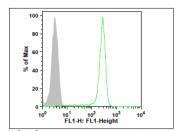
Storage Store at - 20 °C long term, store at 4 °C short term. Avoid

repeated freeze-thaw cycles.

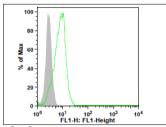
Application IP,FCM,IF

WB	IHC	ICC
Not tested	Not tested	Not tested
FCM	IF	Neutralization
0.5-1.0	5.0-10	-
	FCM	FCM IF

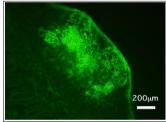
(µg/mL)



[FCM] Mouse FCAMR expressing Ba/F3 cells



[FCM] Human FCAMR expressing Ba/F3 cells



[IF] Mouse peyer's patch

## Reference

- 1. Shibuya A, et al. "Fc alpha/mu receptor mediates endocytosis of IgM-coated microbes." Nat Immunol. 2000 Nov;1(5):441-6.
- 2. Cho Y, et al. "Molecular characteristics of IgA and IgM Fc binding to the Fcalpha/muR." Biochem Biophys Res Commun. 2006 Jun 23;345(1):474-8. \*Application Reference
- 3. Honda S, et al. "Enhanced humoral immune responses against T-independent antigens in Fc alpha/muR-deficient mice." Proc Natl Acad Sci U S A. 2009 Jul 7;106(27):11230-5.

## **UniPlot Summary**

//Function: Functions as a receptor for the Fc fragment of IgA and IgM. Binds IgA and IgM with high affinity and mediates their endocytosis. May function in the immune response to microbes mediated by IgA and IgM.

//Subcellular location: Cell membrane; Single-pass type I membrane protein.

//Tissue specificity: Expressed in several tissues including thymus, spleen, liver, kidney, small and large intestine, testis and placenta. Expressed by oligodendrocytes, B cells and macrophages but not granulocytes, T cells or NK cells (at protein level).

//Sequence similarities: Contains 1 Ig-like V-type (immunoglobulin-like) domain.

