

ADAP Antibody
Catalog # ASC10560**Specification**

ADAP Antibody - Product Information

Application	WB, IF, ICC, E
Primary Accession	O15117
Other Accession	NP_001456 , 42476118
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	ADAP antibody can be used for detection of ADAP by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.

ADAP Antibody - Additional Information

Gene ID	2533
Target/Specificity	
FYB;	

Reconstitution & Storage

ADAP antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

ADAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ADAP Antibody - Protein Information

Name FYB1 ([HGNC:4036](#))

Synonyms FYB, SLAP130

Function

Acts as an adapter protein of the FYN and LCP2 signaling cascades in T-cells (By similarity). May play a role in linking T-cell signaling to remodeling of the actin cytoskeleton (PubMed:10747096, PubMed:16980616). Modulates the expression of IL2 (By similarity). Involved in platelet activation (By similarity). Prevents the degradation of SKAP1 and SKAP2 (PubMed:15849195). May be involved in high affinity immunoglobulin epsilon receptor signaling in mast cells (By similarity).

Cellular Location

Cytoplasm. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00768}. Cell junction {ECO:0000250|UniProtKB:O35601}. Note=Colocalizes with TMEM47 at cell- cell contacts in podocytes. {ECO:0000250|UniProtKB:O35601}

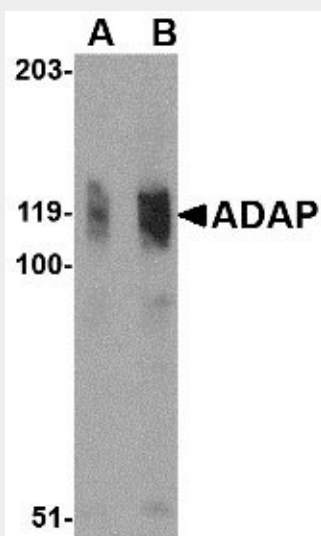
Tissue Location

Expressed in hematopoietic tissues such as myeloid and T-cells, spleen and thymus. Not expressed in B-cells, nor in non- lymphoid tissues

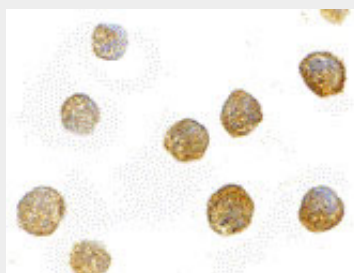
ADAP Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

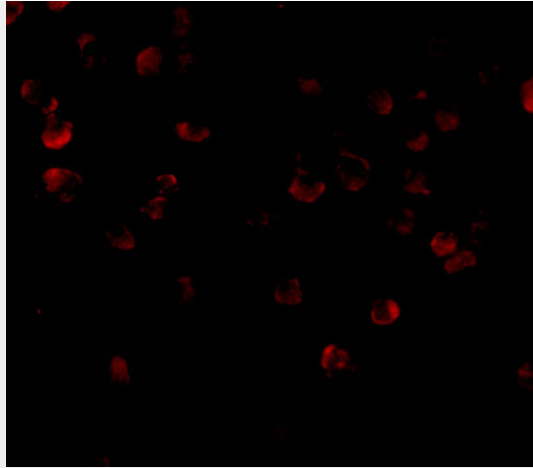
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ADAP Antibody - Images

Western blot analysis of ADAP in K562 cell lysate with ADAP antibody at (A) 0.5 and (B) 1 μ g/mL.



Immunocytochemistry of ADAP in K562 cells with ADAP antibody at 10 μ g/mL.



Immunofluorescence of ADAP in K562 cells with ADAP antibody at 20 µg/mL.

ADAP Antibody - Background

ADAP Antibody: The adhesion and degranulation adaptor protein (ADAP) was initially identified as a molecular adapter that couples T cell receptor (TCR) stimulation to the avidity of integrins governing T cell adhesion. TCR stimulation promotes the formation of a multi-protein complex containing CARMA1, MALT1, and BCL-10, which through the association of ADAP, ultimately activates the NF-κB family of transcription factors. More recent experiments have shown that ADAP controls optimal T cell proliferation, cytokine production, and expression of the Bcl-2 family member Bcl-x(L), suggesting that ADAP regulates T cell activation by promoting antigen-dependent T cell-antigen presenting cell (APC) activation. At least three isoforms of ADAP are known to exist.

ADAP Antibody - References

Griffiths EK, Krawczyk C, Kong YY, et al. Positive regulation of T cell activation and integrin adhesion by the adapter Fyb/Slap. *Science* 2001; 293:2260-3.

Rawlings DJ, Sommer K, and Moreno-Garcia ME. The CARMA1 signalosome links the signalling machinery of adaptive and innate immunity in lymphocytes. *Nat. Rev. Immunol.* 2006; 6:799-812.

Medeiros RB, Burbach BJ, Mueller KL, et al. Regulation of NF-kappaB activation in T cells via association of the adapter proteins ADAP and CARMA1. *Science* 2007; 316:754-8.

Mueller KL, Thomas MS, Burbach BJ, et al. Adhesion and degranulation-promoting adapter protein (ADAP) positively regulates T cell sensitivity to antigen and T cell survival. *J. Immunol.* 2007; 179:3559-69.