# **Technical Data Sheet**

# **Purified Mouse Anti-Human FYB**

#### **Product Information**

610945 **Material Number:** 

Alternate Name: Fyn Binding Protein; SLAP-130

150 µg **Concentration:** 250 μg/ml Clone: 5/FYB

Human FYB aa. 673-783 Immunogen:

Mouse IgG1 Isotype: QC Testing: Human Reactivity:

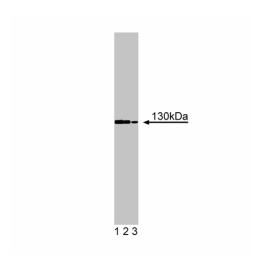
Target MW: 130 kDa

Storage Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium

azide

### Description

Engagement of the T cell receptor (TcR) results in the activation of multiple intracellular src protein tyrosine kinases (PTKs) including p56 [lck] and p59 [fyn]. PTK activation induces TcRζ phosphorylation and the subsequent recruitment and activation of ZAP-70 which specifically phosphorylates SLP-76. SLP-76 interacts with multiple components of T cell signaling pathways, including Grb-2, PLC-7, Vav, and SLAP-130 (also known as SLP-76 Associated Phosphoprotein of 130 kDa). SLAP-130 contains multiple tyrosine based motifs, proline base type I and II SH3 domain binding motifs, lysine/glutamic acid rich nuclear localization motifs, and an SH3-like domain. It associates with the SH2 domain of SLP-76 and is phosphorylated by TcR induced PTKs. This protein has also been reported to directly interact with fyn and has been referred to as fyn binding protein (FYB). Co-transfection data has shown that a limited concentration of FYB/SLAP-130 enhances TcR-induced IL-2 production, while overexpression downregulates gene expression. Thus, FYB/SLAP-130 is viewed to be a regulatory component of the fyn/SLP-76 signaling cascade in T cells.



Western blot analysis of FYB on a Jurkat cell lysate (Human T-cell leukemia; ATCC TIB-152). Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-human FYB antibody.

# **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

### **BD Biosciences**

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## **Application Notes**

#### Application

- :			
	Western blot	Routinely Tested	
	Immunofluorescence	Tested During Development	

### **Recommended Assay Procedure:**

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western\_Blotting.shtml

## **Suggested Companion Products**

Catalog Number	Name	Size	Clone
611451	Jurkat Cell Lysate	500 μg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

#### **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

### References

da Silva AJ, Li Z, de Vera C, Canto E, Findell P, Rudd CE. Cloning of a novel T-cell protein FYB that binds FYN and SH2-domain-containing leukocyte protein 76 and modulates interleukin 2 production. *Proc Natl Acad Sci U S A.* 1997; 94(14):7493-7498.(Biology)

Geng L, Pfister S, Kraeft SK, Rudd CE. Adaptor FYB (Fyn-binding protein) regulates integrin-mediated adhesion and mediator release: differential involvement of the FYB SH3 domain. *Proc Natl Acad Sci U S A*. 2001; 98(20):11527-11532.(Biology: Flow cytometry, Immunofluorescence, Immunoprecipitation, Western blot) Musci MA, Hendricks-Taylor LR, Motto DG. Molecular cloning of SLAP-130, an SLP-76-associated substrate of the T cell antigen receptor-stimulated protein tyrosine kinases. *J Biol Chem.* 1997; 272(18):11674-11677.(Biology)

Oda A, Ikeda Y, Ochs HD. Rapid tyrosine phosphorylation and activation of Bruton's tyrosine/Tec kinases in platelets induced by collagen binding or CD32 cross-linking. *Blood*. 2000; 95(5):1663-1670.(Biology: Western blot)

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