

Technical Data Sheet

Purified Mouse anti-BLNK

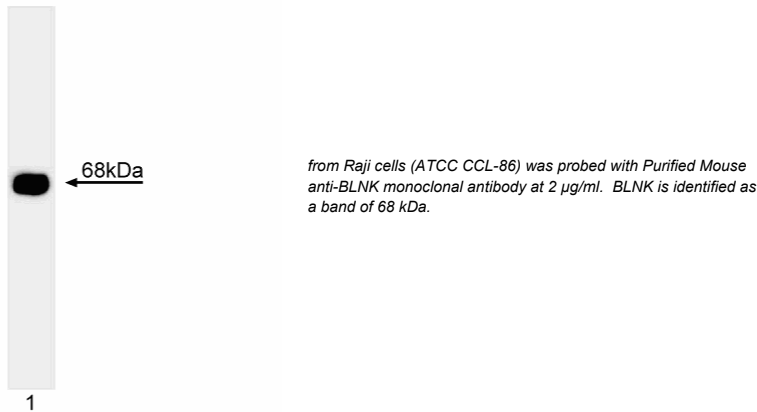
Product Information

Material Number:	559930
Alternate Name:	SLP-65, BASH, BCA
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	2B11
Immunogen:	Human N-terminal BLNK Recombinant Protein
Isotype:	Mouse IgG2a, κ
Reactivity:	Human, Mouse
Target MW:	68, 70 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

B cell activation is initiated by crosslinking the B cell receptor, which leads to activation of non-receptor protein tyrosine kinases (PTK), including Btk, Syk, and three Src kinases, Fyn, Lyn, and Blk. Activated PTKs then phosphorylate multiple cellular proteins involved in B lymphocyte signaling. Syk is responsible for the tyrosine phosphorylation of B cell linker protein (BLNK), a member of the SLP-76 family of adapter proteins. Phosphorylation of human BLNK at tyrosines 84, 178, and 189 (Y84, Y178, and Y189) creates docking sites for PLCγ2, leading to the activation of downstream signaling pathways.

The 2B11 monoclonal antibody recognizes BLNK, regardless of phosphorylation status. A fusion protein representing amino acids 4-205 of human BLNK was used as the immunogen. BLNK is expressed as two phosphoproteins migrating at 68 and 70 kDa in SDS/PAGE that represent alternatively spliced forms of human BLNK.



Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested
Intracellular staining (flow cytometry)	Reported

Recommended Assay Procedure:

This purified antibody is routinely tested by western blot. Lysates from Raji B cells (ATCC CCL-86) are recommended as a positive control. We recommend the conjugated antibody formats PE, Alexa 488, and Alexa 647 (Cat. nos. 558688, 558693, and 558692, respectively) for intracellular staining with flow cytometric analysis.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. 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.

References

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Janssen E, Zhang W. Adaptor proteins in lymphocyte activation. *Curr Opin Immunol.* 2003; 15:269-276.(Biology: Activation)

Li X, Martin F, Oliver AM, Kearney JF, Carter RH. Antigen receptor proximal signaling in splenic B-2 cell subsets. *J Immunol.* 2001; 166:3122-3129.(Clone-specific: Western blot)

Minegishi Y, Rohrer J, Coustan-Smith E, et al. An essential role for BLNK in human B cell development. *Science.* 1999; 286:1954-1957.(Immunogen)

Taguchi T, Kiyokawa N, Takenouch H, et al. Deficiency of BLNK hampers PLC- γ 2 phosphorylation and Ca²⁺ influx induced by the pre-B-cell receptor in human pre-B cells. *Immunology.* 2004; 122:575-582.(Clone-specific: Flow cytometry, Western blot)

Wu JN, Koretzky GA. The SLP-76 family of adapter proteins. *Semin Immunol.* 2004; 16:379-393.(Biology)