

#3571 Store at -20C

Phospho-CD19 (Tyr531) Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	95	Rabbit	#P15391	930

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Phospho-CD19 (Tyr531) Antibody detects endogenous levels of CD19 only when phosphorylated at tyrosine 531.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues around Tyr531 of human CD19. Antibodies are purified by protein A and peptide affinity chromatography.

Background

CD19 is a 95 kDa coreceptor which amplifies the signaling cascade in B cells (1). On the B cell surface, CD19 associates with CD21, CD81, and Leu-13 to exert its function. The cytoplasmic tail of CD19 has nine conserved tyrosine residues playing critical roles in CD19 mediated function by coupling signaling molecules to the receptor (1). After B cell receptor or CD19 ligation, Tyr531 and Tyr500 of CD19 are progressively phosphorylated. This phosphorylation enables the coupling of PI3 kinase and Src family tyrosine kinase to CD19 and activates the PI3K and Src signaling pathways (2,3). Coligation of B cell receptor and CD19 also promotes Tyr409 phosphorylation in CD19. The phosphorylation at these sites enables its binding to Vav and mediates elevated intracellular calcium response, as well as the JNK pathway (4,5).

Background References

1. Tedder, T.F. et al. (1997) *Immunity* 6, 107-18.
2. Buhl, A.M. and Cambier, J.C. (1999) *J Immunol* 162, 4438-46.
3. Fujimoto, M. et al. (2000) *Immunity* 13, 47-57.
4. O'Rourke, L.M. et al. (1998) *Immunity* 8, 635-45.
5. Sato, S. et al. (1997) *Proc Natl Acad Sci U S A* 94, 13158-62.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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