

Store at  
-20C  
#90176**CD19 (Intracellular Domain) (D4V4B) XP<sup>®</sup>  
Rabbit mAb****Orders:** 877-616-CELL (2355)  
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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

<b>Applications:</b> W, IP, IHC-Bond, IHC-P, FC-FP	<b>Reactivity:</b> H M Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 95	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P15391	<b>Entrez-Gene Id:</b> 930
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**Product Usage  
Information****Application**

Western Blotting  
Immunoprecipitation  
IHC Leica Bond  
Immunohistochemistry (Paraffin)  
Flow Cytometry (Fixed/Permeabilized)

**Dilution**

1:1000  
1:100  
1:800 - 1:3200  
1:1600 - 1:6400  
1:6400 - 1:12800

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #86916.

**Specificity/Sensitivity**

CD19 (Intracellular Domain) (D4V4B) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total CD19 protein.

**Species predicted to react  
based on 100% sequence  
homology**

Bovine

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu427 of human CD19 protein.

**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**

**W:** Western Blotting **IP:** Immunoprecipitation **IHC-Bond:** IHC Leica Bond **IHC-P:** Immunohistochemistry (Paraffin) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **Mk:** Monkey

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