



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at -20C  
#2796

## Lyn (C13F9) Rabbit mAb

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

<b>Applications:</b> W, IP, IHC-P	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 56	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P07948	<b>Entrez-Gene Id:</b> 4067
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### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation  
Immunohistochemistry (Paraffin)

#### Dilution

1:1000  
1:50  
1:400

### 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 #48103.

### Specificity/Sensitivity

Lyn (C13F9) Rabbit mAb detects endogenous levels of total Lyn protein. This antibody does not cross-react with any other Src-family members.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the amino-terminal sequence of human Lyn.

### Background

Lyn, one of the Src family members, is predominantly expressed in hematopoietic cells (1). Two tyrosine residues have been reported to play a crucial role in the regulation of protein tyrosine kinases of the Src family. Autophosphorylation of Tyr396 (equivalent to Tyr416 of Src), located in the catalytic domain, correlates with enzyme activation. Csk-mediated phosphorylation of the carboxy-terminal Tyr507 (equivalent to Tyr527 of Src) inactivates the kinase. Tyrosine phosphorylation and activation of Lyn occurs upon association with cell surface receptors such as the B cell Ag receptor (BCR) and CD40 (2-4). Studies using knockout mice have shown that the net effect of Lyn deficiency is to render B cells hypersensitive to BCR stimulation (5-7), suggesting that the most critical role for Lyn *in vivo* is in the down-regulation of B cell responses. Lyn is also involved in controlling the migration and development of specific B cell populations (8).

### Background References

1. Yamanashi, Y. et al. (1989) *Proc. Natl. Acad. Sci. USA* 86, 6538-6542.
2. Yamanashi, Y. et al. (1991) *Science* 251, 192-194.
3. Burkhardt, A.L. et al. (1991) *Proc. Natl. Acad. Sci. USA* 88, 7410-7414.
4. Ren, C.L. et al. (1994) *J. Exp. Med.* 179, 673-680.
5. Wang, J. et al. (1996) *J Exp Med* 184, 831-8.
6. Chan, V.W. et al. (1997) *Immunity* 7, 69-81.
7. Hibbs, M.L. et al. (1995) *Cell* 83, 301-11.
8. Seo, S. et al. (2001) *J Immunol* 166, 3710-6.

### 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-P:** Immunohistochemistry (Paraffin)

### Cross-Reactivity Key

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

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