

#4576 Store at -20°C

Lyn (5G2) Mouse mAb



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	56	Mouse IgG2b	#P07948	4067

Product Usage Information

Application

Western Blotting

Dilution

1:1000

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.

Specificity / Sensitivity

Lyn (5G2) Mouse mAb detects endogenous levels of total Lyn protein. This antibody may cross-react with other Src-family members.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant His-tagged human Lyn protein.

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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting

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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