

#4023 Store at -20°C

Fyn Antibody



✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #2534
Swiss-Prot Acc. #P06241

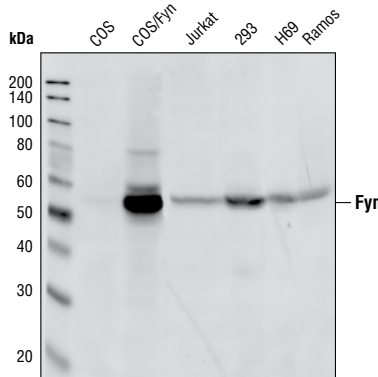
Applications W Endogenous	Species Cross-Reactivity*		Molecular Wt. 59 kDa	Source Rabbit**
	H	M		

Background: The Src family of protein tyrosine kinases (including Src, Lyn, Fyn, Yes, Lck, Blk and Hck) are important in the regulation of growth and differentiation of eukaryotic cells (1). Src activity is regulated by tyrosine phosphorylation at two sites, but with opposing effects. Phosphorylation of Tyr416 in the activation loop of the kinase domain by Csk upregulates enzyme activity, whereas phosphorylation of Tyr527 in the carboxy terminal tail renders the enzyme less active (2).

Fyn is a 59 kDa member of the Src family of tyrosine kinases. The carboxy terminus of Fyn shares extensive amino acid sequence homology with Src, but is very different within the amino-terminal 81 amino acid residues. The Fyn protein is synthesized and N-myristoylated on cytosolic polysomes and then rapidly targeted to the plasma membrane, where it is palmitoylated (3). The corresponding sequences surrounding Tyr416 and Tyr527 of Src are conserved in Fyn and thus may be similarly regulated by phosphorylation. Dually acetylated Fyn clusters in caveolae-like membrane microdomains and can interact with a variety of other signaling molecules. Fyn's biological functions are diverse and include signaling via the T cell receptor, regulation of brain function and adhesion mediated signaling (4, 5). Alteration of the levels of Fyn in appropriate target tissues may lead to better treatments for some related diseases.

Specificity/Sensitivity: Fyn Antibody detects endogenous levels of total Fyn proteins. This antibody does not cross-react with Src and Hck family members.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser25 of human Fyn. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of cell extracts from various cell lines using Fyn Antibody.

Background References:

- (1) Thomas, S.M. and Brugge, J.S. (1997) *Annu. Rev. Cell Dev. Biol.* 13, 513–609.
- (2) Hunter, T. (1987) *Cell* 49, 1–4.
- (3) Resh, M.D. (1998) *Int J Biochem Cell Biol* 30, 1159–62.
- (4) Nel, A.E. (2002) *J Allergy Clin Immunol* 109, 758–70.
- (5) Fukui, I. et al. (2000) *Eur J Immunol* 30, 3507–15.

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.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western Blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey 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 All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.