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## Fyn Antibody



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Ear Desearch Use Only Not for Use in Diagnostic Procedures

Applications: WB	Reactivity: H M	Sensitivity: Endogenous	<b>MW (kDa):</b> 59	Source: Rabbit	UniProt ID: #P06241	Entrez-Gene Id: 2534	
Product Usage Information	Ар	Application			Dilution		
	We	estern Blotting			1:1000		
Storage		plied in 10 mM sodi C. Do not aliquot the	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	00 μg/ml BSA and 50% ç	glycerol. Store at –		
Specificity / Sensitiv		Fyn Antibody detects endogenous levels of total Fyn proteins. This antibody does not cross-react with Src and Hck family members.					
Source / Purification	n Poly	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.

The Src family of protein tyrosine kinases, which includes Src, Lyn, Fyn, Yes, Lck, Blk, and Hck, are **Background** 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. While phosphorylation at Tyr416 in the activation loop of the kinase domain upregulates enzyme activity, phosphorylation at Tyr527 in the carboxy-

terminal tail by Csk 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.

**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. Fukai, I. et al. (2000) Eur J Immunol 30, 3507-15.

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

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, Western Blot Buffer

0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key** WB: Western Blotting

H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster **Cross-Reactivity Key** 

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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