

**Qty:** 100 μg/200 μl Mouse anti-p59<sup>fyn</sup> **Catalog No.** 13-7800

Lot No. See product label

# Mouse anti-p59<sup>FYN</sup>

# FORM

This monoclonal antibody is supplied as a 200 µl aliquot at 0.5 mg/ml in phosphate buffered saline, pH 7.4, containing 0.1% sodium azide. The antibody is highly purified from mouse ascites by protein A affinity chromatography.

CLONE: Fyn-1S ISOTYPE: IgG1-kappa

IMMUNOGEN: A fusion protein consisting of amino acids 1-206 of murine p59<sup>fyn (1)</sup>

#### SPECIFICITY

This antibody reacts with a unique region of p59<sup>fyn</sup> (Fyn) between amino acids 26 and 75<sup>(1)</sup>. Reactivity has been confirmed by western blot or immunoprecipitation analysis of extracts derived from human T cell hybridomas, Jurkat cells, mouse T cell hybridomas, and recombinant Fyn.

# USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.1-1 μg/ml Immunoprecipitation, IP-Kinase Assay<sup>(9)</sup>: 2-5 μg Western Blotting: 1-3 μg/ml

#### STORAGE

PI137800

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

(cont'd)

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# BACKGROUND<sup>(10,11)</sup>

Fyn is a 59 kDa non-receptor protein tyrosine kinase belonging to the Src family of cytoplasmic tyrosine kinases. Members of this family possess a similar structural organization which can be divided into four distinct domains including: 1) N-terminal myristoylation on glycine- required for membrane localization, 2) a unique N-terminal domain which may dictate specificity of association, 3) conserved SH3 and SH2 domains, and 4) a C-terminal catalytic domain<sup>(2)</sup>. Fyn is expressed predominately in tissues of neuronal and hematopoietic origin. Neuronal Fyn and hematopoietic Fyn differ at the junction of the SH2 and kinase domains due to tissue specific alternative splicing<sup>(3)</sup>. Fyn was also the first tyrosine kinase found to be associated with the T cell antigen receptor complex<sup>(4)</sup>. The interaction of Fyn with the TCR complex is mediated by the amino terminal domain of Fyn and at least one ARAM sequence (antigen recognition activation motif) in the TCR zeta chain (TCR $\zeta$ )<sup>(2)</sup>. In addition to its association with TCR $\zeta$ , Fyn has been found to associate with the p21<sup>ras</sup> interacting protein p62, and this interaction is dependent upon the SH3 domain of Fyn<sup>(5)</sup>. Studies on mice expressing kinase-inactive Fyn and on Fyn knockout mice indicate that Fyn is likely to play a role in the later stages of thymocyte development, but is not required for TCR- mediated proliferation in peripheral cells<sup>(6,7,8)</sup>.

# REFERENCES

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# **RELATED PRODUCTS**

PI137800

Product	Conjugate	Cat. No.
Goat anti-Mouse IgG (H+L)	Purified	81-6500
(ZyMAX™ Grade)	FITC	81-6511
	TRITC	81-6514
	Cy™3	81-6515
	Cy™5	81-6516
	HRP	81-6520
	AP	81-6522
	Biotin	81-6540
Protein A	Sepharose <sup>®</sup> 4B	10-1041
	Sepharose 4B	
rec-Protein G	Sepharose <sup>®</sup> 4B	10-1241

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