

**FYN Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1580a****Specification****FYN Antibody - Product Information**

Application	<b>E, WB</b>
Primary Accession	<a href="#">P06241</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>61kDa KDa</b>

**Description**

This gene is a member of the protein-tyrosine kinase oncogene family. It encodes a membrane-associated tyrosine kinase that has been implicated in the control of cell growth. The protein associates with the p85 subunit of phosphatidylinositol 3-kinase and interacts with the fyn-binding protein. Alternatively spliced transcript variants encoding distinct isoforms exist.

**Immunogen**

Purified recombinant fragment of human FYN expressed in E. Coli. <br />

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**FYN Antibody - Additional Information**

**Gene ID** 2534

**Other Names**

Tyrosine-protein kinase Fyn, 2.7.10.2, Proto-oncogene Syn, Proto-oncogene c-Fyn, Src-like kinase, SLK, p59-Fyn, FYN

**Dilution**

E~~1/10000

WB~~1/500 - 1/2000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

FYN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**FYN Antibody - Protein Information**

**Name** FYN

## Function

Non-receptor tyrosine-protein kinase that plays a role in many biological processes including regulation of cell growth and survival, cell adhesion, integrin-mediated signaling, cytoskeletal remodeling, cell motility, immune response and axon guidance (PubMed:<a href="http://www.uniprot.org/citations/11536198" target="\_blank">11536198</a>, PubMed:<a href="http://www.uniprot.org/citations/15489916" target="\_blank">15489916</a>, PubMed:<a href="http://www.uniprot.org/citations/15557120" target="\_blank">15557120</a>, PubMed:<a href="http://www.uniprot.org/citations/16387660" target="\_blank">16387660</a>, PubMed:<a href="http://www.uniprot.org/citations/20100835" target="\_blank">20100835</a>, PubMed:<a href="http://www.uniprot.org/citations/7568038" target="\_blank">7568038</a>, PubMed:<a href="http://www.uniprot.org/citations/7822789" target="\_blank">7822789</a>). Inactive FYN is phosphorylated on its C-terminal tail within the catalytic domain (PubMed:<a href="http://www.uniprot.org/citations/15489916" target="\_blank">15489916</a>). Following activation by PKA, the protein subsequently associates with PTK2/FAK1, allowing PTK2/FAK1 phosphorylation, activation and targeting to focal adhesions (PubMed:<a href="http://www.uniprot.org/citations/15489916" target="\_blank">15489916</a>). Involved in the regulation of cell adhesion and motility through phosphorylation of CTNNB1 (beta-catenin) and CTNND1 (delta-catenin) (PubMed:<a href="http://www.uniprot.org/citations/17194753" target="\_blank">17194753</a>). Regulates cytoskeletal remodeling by phosphorylating several proteins including the actin regulator WAS and the microtubule-associated proteins MAP2 and MAPT (PubMed:<a href="http://www.uniprot.org/citations/14707117" target="\_blank">14707117</a>, PubMed:<a href="http://www.uniprot.org/citations/15536091" target="\_blank">15536091</a>). Promotes cell survival by phosphorylating AGAP2/PIKE-A and preventing its apoptotic cleavage (PubMed:<a href="http://www.uniprot.org/citations/16841086" target="\_blank">16841086</a>). Participates in signal transduction pathways that regulate the integrity of the glomerular slit diaphragm (an essential part of the glomerular filter of the kidney) by phosphorylating several slit diaphragm components including NPHS1, KIRREL1 and TRPC6 (PubMed:<a href="http://www.uniprot.org/citations/14761972" target="\_blank">14761972</a>, PubMed:<a href="http://www.uniprot.org/citations/18258597" target="\_blank">18258597</a>, PubMed:<a href="http://www.uniprot.org/citations/19179337" target="\_blank">19179337</a>). Plays a role in neural processes by phosphorylating DPYSL2, a multifunctional adapter protein within the central nervous system, ARHGAP32, a regulator for Rho family GTPases implicated in various neural functions, and SNCA, a small pre-synaptic protein (PubMed:<a href="http://www.uniprot.org/citations/11162638" target="\_blank">11162638</a>, PubMed:<a href="http://www.uniprot.org/citations/12788081" target="\_blank">12788081</a>, PubMed:<a href="http://www.uniprot.org/citations/19652227" target="\_blank">19652227</a>). Involved in reelin signaling by mediating phosphorylation of DAB1 following reelin (RELN)- binding to its receptor (By similarity). Participates in the downstream signaling pathways that lead to T-cell differentiation and proliferation following T-cell receptor (TCR) stimulation (PubMed:<a href="http://www.uniprot.org/citations/22080863" target="\_blank">22080863</a>). Phosphorylates PTK2B/PYK2 in response to T-cell receptor activation (PubMed:<a href="http://www.uniprot.org/citations/20028775" target="\_blank">20028775</a>). Also participates in negative feedback regulation of TCR signaling through phosphorylation of PAG1, thereby promoting interaction between PAG1 and CSK and recruitment of CSK to lipid rafts (PubMed:<a href="http://www.uniprot.org/citations/18056706" target="\_blank">18056706</a>). CSK maintains LCK and FYN in an inactive form (By similarity). Promotes CD28-induced phosphorylation of VAV1 (PubMed:<a href="http://www.uniprot.org/citations/11005864" target="\_blank">11005864</a>). In mast cells, phosphorylates CLNK after activation of immunoglobulin epsilon receptor signaling (By similarity). Can also promote CD244-mediated NK cell activation (PubMed:<a href="http://www.uniprot.org/citations/15713798" target="\_blank">15713798</a>).

## Cellular Location

Cytoplasm. Nucleus Cell membrane. Perikaryon {ECO:0000250|UniProtKB:Q62844} Note=Present and active in lipid rafts (PubMed:12218089) Palmitoylation is crucial for proper trafficking (PubMed:8206991)

### Tissue Location

Isoform 1 is highly expressed in the brain. Isoform 2 is expressed in cells of hemopoietic lineages, especially T- lymphocytes.

### FYN Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

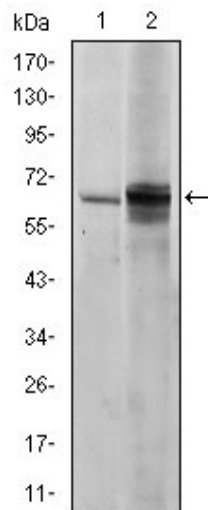
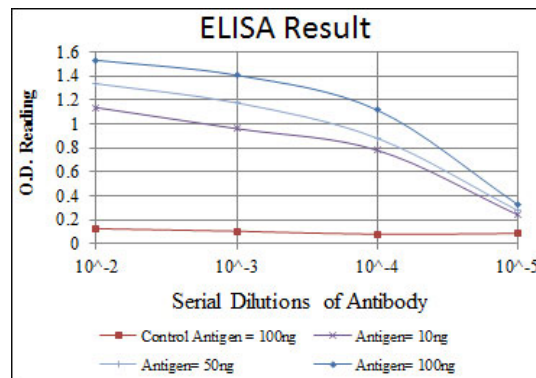


Figure 1: Western blot analysis using FYN mouse mAb against NIH/3T3 (1) and HeLa (2) cell lysate.

### FYN Antibody - References

1. Mol Cell Biol. 2009 Dec;29(24):6438-48.
2. Cancer Res. 2009 Sep 1;69(17):6889-98.

