

Anti-Fyn Picoband Antibody

Catalog # ABO11888

Specification

Anti-Fyn Picoband Antibody - Product Information

Application WB
Primary Accession P06241
Host Rabbit
Reactivity Human
Clonality Polyclonal
Format Lyophilized

Description

Rabbit IgG polyclonal antibody for Tyrosine-protein kinase Fyn(FYN) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Fyn Picoband 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

Calculated MW 60762 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human

Subcellular Localization

Cytoplasm. Nucleus. Cell membrane. Present and active in lipid rafts. Palmitoylation is crucial for proper trafficking.

Tissue Specificity

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

Protein Name

Tyrosine-protein kinase Fyn

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human Fyn(222-255aa ETLQQLVQHYSERAAGLCCRLVVPCHKGMPRLTD), identical to the related mouse and rat sequences.





PurificationImmunogen affinity purified.

Cross ReactivityNo cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily.

Non-receptor tyrosine-protein kinase that plays a role in many biological processes including

Anti-Fyn Picoband Antibody - Protein Information

Name FYN

Function

regulation of cell growth and survival, cell adhesion, integrin-mediated signaling, cytoskeletal remodeling, cell motility, immune response and axon guidance (PubMed:11536198, PubMed:15489916, PubMed:15557120, PubMed:16387660, PubMed:20100835, PubMed:7568038, PubMed:7822789). Inactive FYN is phosphorylated on its C-terminal tail within the catalytic domain (PubMed:15489916). Following activation by PKA, the protein subsequently associates with PTK2/FAK1, allowing PTK2/FAK1 phosphorylation, activation and targeting to focal adhesions (PubMed:15489916). Involved in the regulation of cell adhesion and motility through phosphorylation of CTNNB1 (beta-catenin) and CTNND1 (delta-catenin) (PubMed: 17194753). Regulates cytoskeletal remodeling by phosphorylating several proteins including the actin regulator WAS and the microtubule-associated proteins MAP2 and MAPT (PubMed: 14707117, PubMed:15536091). Promotes cell survival by phosphorylating AGAP2/PIKE- A and preventing its apoptotic cleavage (PubMed:16841086). 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:14761972, PubMed: 18258597, PubMed:19179337). 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:11162638, PubMed:12788081, PubMed:19652227). 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:22080863). Phosphorylates PTK2B/PYK2 in response to T-cell receptor activation (PubMed:20028775). 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:18056706). CSK maintains LCK and FYN in an inactive form (By similarity). Promotes CD28-induced phosphorylation of VAV1 (PubMed: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: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.

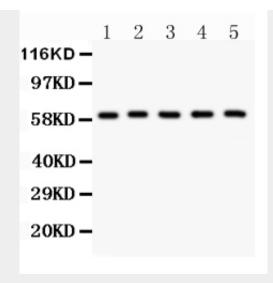
Anti-Fyn Picoband Antibody - Protocols

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

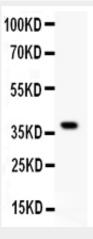
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Fyn Picoband Antibody - Images





Anti- Fyn antibody, ABO11888, Western blottingAll lanes: Anti Fyn(ABO11888) at 0.5ug/mlLane 1: JURKAT Whole Cell Lysate at 40ugLane 2: HL-60 Whole Cell Lysate at 40ugLane 3: K562 Whole Cell Lysate at 40ugLane 4: RAJI Whole Cell Lysate at 40ugLane 5: CEM Whole Cell Lysate at 40ugPredicted bind size: 61KDObserved bind size: 61KD



Anti- Fyn antibody, ABO11888, Western blottingAll lanes: Anti (ABO11888) at 0.5ug/mlWB: Recombinant Human Fyn Protein 0.5ngPredicted bind size: 39KDObserved bind size: 39KD

Anti-Fyn Picoband Antibody - Background

Proto-oncogene tyrosine-protein kinase Fyn, also known as SYN or SLK, is an enzyme that in humans is encoded by the FYN gene. It is mapped to 6q21. This gene is a member of the protein-tyrosine kinase oncogene family. FYN is a protein, present in the signaling pathway of integrins, which activates ras. It is primarily localized to the cytoplasmic leaflet of the plasma membrane, where it phosphorylates tyrosine residues on key targets involved in a variety of different signaling pathways. Tyrosine phosphorylation of target proteins by FYN serves to either regulate target protein activity, and/or to generate a binding site on the target protein that recruits other signaling molecules.