

ARG54079 anti-Fyn antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes FYN
Tested Reactivity	Hu, Ms, Rat, Mk
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Target Name	Fyn
Species	Human
Immunogen	Purified recombinant human Fyn protein fragments expressed in E.coli.
Conjugation	Un-conjugated
Alternate Names	p59-FYN; Tyrosine-protein kinase Fyn; Src-like kinase; Proto-oncogene c-Fyn; p59-Fyn; Proto-oncogene Syn; SYN; SLK; EC 2.7.10.2

Application Instructions

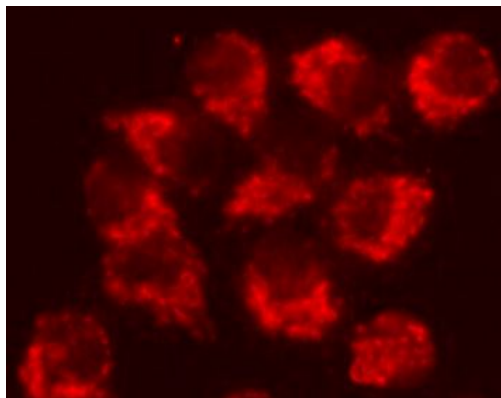
Application table	Application	Dilution
	ICC/IF	1:50
	WB	1:500
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	59 kDa	

Properties

Form	Liquid
Purification	Affinity purified
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	10 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

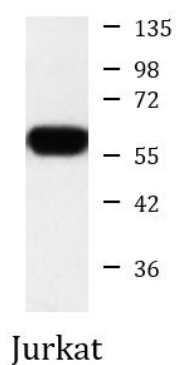
Bioinformatics

Gene Symbol	FYN
Gene Full Name	FYN proto-oncogene, Src family tyrosine kinase
Background	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. Inactive FYN is phosphorylated on its C-terminal tail within the catalytic domain. Following activation by PKA, the protein subsequently associates with PTK2/FAK1, allowing PTK2/FAK1 phosphorylation, activation and targeting to focal adhesions. Involved in the regulation of cell adhesion and motility through phosphorylation of CTNNB1 (beta-catenin) and CTNND1 (delta-catenin). Regulates cytoskeletal remodeling by phosphorylating several proteins including the actin regulator WAS and the microtubule-associated proteins MAP2 and MAPT. Promotes cell survival by phosphorylating AGAP2/PIKE-A and preventing its apoptotic cleavage. 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, KIRREL and TRPC6. 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. Participates in the downstream signaling pathways that lead to T-cell differentiation and proliferation following T-cell receptor (TCR) stimulation. 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. CSK maintains LCK and FYN in an inactive form. Promotes CD28-induced phosphorylation of VAV1.
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. Inactive FYN is phosphorylated on its C-terminal tail within the catalytic domain. Following activation by PKA, the protein subsequently associates with PTK2/FAK1, allowing PTK2/FAK1 phosphorylation, activation and targeting to focal adhesions. Involved in the regulation of cell adhesion and motility through phosphorylation of CTNNB1 (beta-catenin) and CTNND1 (delta-catenin). Regulates cytoskeletal remodeling by phosphorylating several proteins including the actin regulator WAS and the microtubule-associated proteins MAP2 and MAPT. Promotes cell survival by phosphorylating AGAP2/PIKE-A and preventing its apoptotic cleavage. 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, KIRREL and TRPC6. 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. Participates in the downstream signaling pathways that lead to T-cell differentiation and proliferation following T-cell receptor (TCR) stimulation. 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. CSK maintains LCK and FYN in an inactive form. Promotes CD28-induced phosphorylation of VAV1. [UniProt]
Highlight	Related Antibody Duos and Panels: ARG30169 Src Family Protein Tyrosine Kinases Antibody Panel Related products: Fyn antibodies ; Fyn Duos / Panels ; Anti-Mouse IgG secondary antibodies ;
Research Area	Cancer antibody; Neuroscience antibody; Signaling Transduction antibody; Src Family Protein Tyrosine Kinases antibody
Calculated Mw	61 kDa
PTM	Autophosphorylated at Tyr-420. Phosphorylation on the C-terminal tail at Tyr-531 by CSK maintains the enzyme in an inactive state (By similarity). PTPRC/CD45 dephosphorylates Tyr-531 leading to activation. Ultraviolet B (UVB) strongly increase phosphorylation at Thr-12 and kinase activity, and promotes translocation from the cytoplasm to the nucleus. Dephosphorylation at Tyr-420 by PTPN2 negatively regulates T-cell receptor signaling. Palmitoylation at Cys-3 and Cys-6 regulates subcellular location.
Cellular Localization	Cytoplasm. Nucleus. Cell membrane. Note: Present and active in lipid rafts. Palmitoylation is crucial for proper trafficking.



ARG54079 anti-Fyn antibody ICC/IF image

Immunofluorescence: HeLa cells fixed with -20°C Methanol and stained with ARG54079 anti-Fyn antibody at 1:50 dilution.



ARG54079 anti-Fyn antibody WB image

Western blot: Jurkat cell lysate stained with ARG54079 anti-Fyn antibody at 1:500 dilution.
