



Rabbit Anti-SLK antibody

SL3519R

Product Name:	SLK
Chinese Name:	酪氨酸蛋白激酶Fyn/同步原癌基因抗体
Alias:	Fyn; C syn protooncogene; FYN oncogene related to SRC FGR YES; MGC45350; OKT3 induced calcium influx regulator; P59 FYN; Protein tyrosine kinase fyn; Proto oncogene tyrosine protein kinase fyn; Protooncogene Syn; SLK; Src like kinase; Src yes related novel gene; Src/yes related novel gene;SYN; Tyrosine kinase p59fyn T; Tyrosine kinase p59fyn(T); FYN_HUMAN; Tyrosine-protein kinase Fyn; Proto-oncogene Syn; Proto-oncogene c-Fyn; Src-like kinase; p59-Fyn.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	59kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SLK:165-270/537
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. [provided by RefSeq, Jul 2008]

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.

Subunit:

Interacts (via its SH3 domain) with PIK3R1 and PRMT8. Interacts with FYB, PAG1, and SH2D1A. Interacts with CD79A (tyrosine-phosphorylated form); the interaction increases FYN activity. Interacts (via SH2 domain) with CSF1R (tyrosine phosphorylated). Interacts with TOM1L1 (phosphorylated form). Interacts with KDR (tyrosine phosphorylated). Interacts (via SH3 domain) with KLHL2 (via N-terminus). Interacts with SH2D1A and SLAMF1. Interacts (via its SH3 domain) with HEV ORF3 protein. Interacts with ITCH; the interaction phosphorylates ITCH and negatively regulates its activity. Interacts with FASLG. Interacts with RUNX3. Interacts with KIT. Interacts with EPHA8; possible downstream effector of EPHA8 in regulation of cell adhesion. Interacts with PTK2/FAK1; this interaction leads to PTK2/FAK1 phosphorylation and activation. Interacts with CAV1; this interaction couples integrins to the Ras-ERK pathway.

Subcellular Location:

Cytoplasm. Nucleus. Cell membrane. Note=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.

Post-translational modifications:

Autophosphorylated at Tyr-420. Phosphorylation on the C-terminal tail at Tyr-531 by CSK maintains the enzyme in an inactive state. 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.

Similarity:

Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily. Contains 1 protein kinase domain. Contains 1 SH2 domain. Contains 1 SH3 domain.

SWISS:

P06241

Gene ID:

2534

Database links:

[Entrez Gene: 2534](#)Human

[Entrez Gene: 14360](#)Mouse

[Entrez Gene: 25150](#)Rat

[Omim: 137025](#)Human

[SwissProt: P06241](#)Human

[SwissProt: P39688](#)Mouse

[SwissProt: Q62844](#)Rat

[Unigene: 390567](#)Human

[Unigene: 4848](#)Mouse

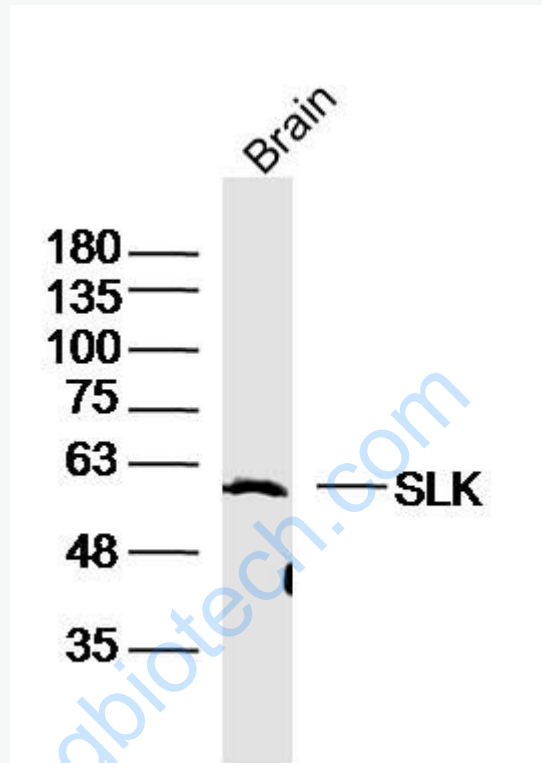
[Unigene: 19361](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Picture:



Sample:

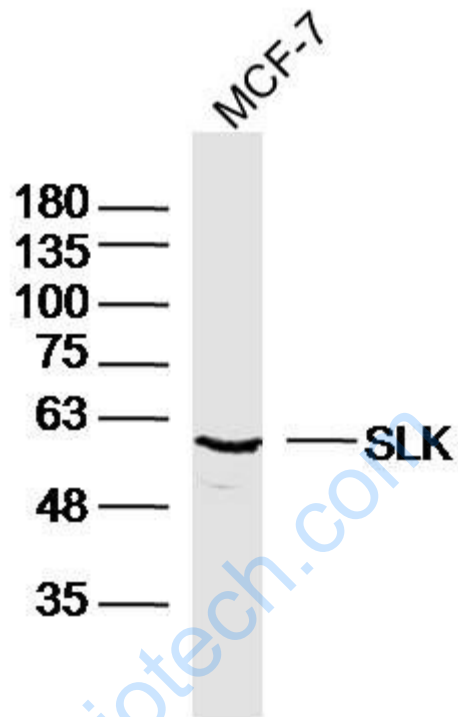
Brain (Mouse) Lysate at 40 ug

Primary: Anti- SLK (SL3519R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 59kD

Observed band size: 59kD



Sample:

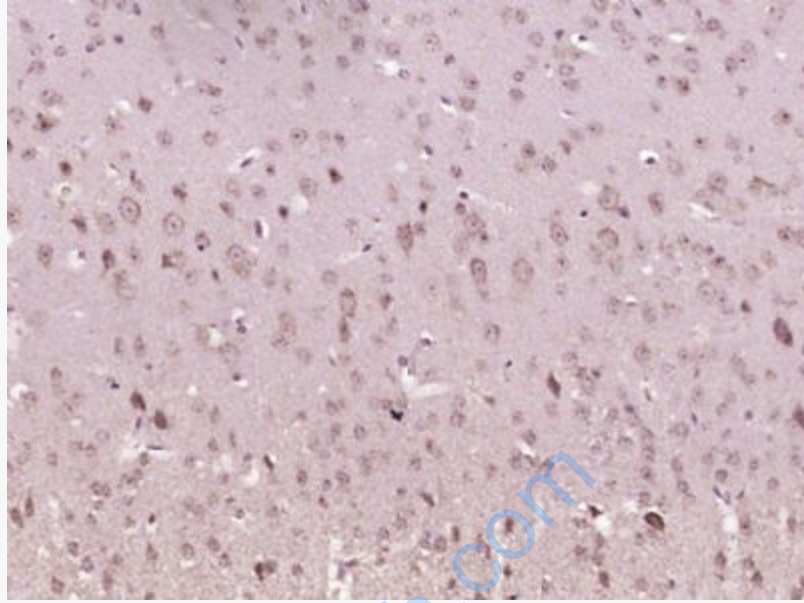
MCF-7 Cell (Human) Lysate at 30 ug

Primary: Anti- SLK (SL3519R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 59kD

Observed band size: 59kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SLK) Polyclonal Antibody, Unconjugated (SL3519R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.