

Lck (120-226): sc-4039

BACKGROUND

Src is the human homolog of the v-Src gene of the Rous sarcoma virus, also known as avian sarcoma virus, or ASV. Src was the first proto-oncogenic, non-receptor tyrosine kinase characterized in human. By virtue of common structural motifs, the Src family is composed of nine members in vertebrates, including Src, Yes, Fgr, Frk, Fyn, Lyn, Hck, Lck and Blk. Src family kinases transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility and adhesion. Src family kinases contain an amino terminal cell membrane anchor, followed by an SH3 domain and an SH2 domain that are involved in modular association and activation, respectively. Src family kinases are normally maintained in an inactive state and can be activated transiently during cellular events such as mitosis. Different subcellular localizations of Src family kinases may be important for the regulation of specific cellular processes, such as mitogenesis, cytoskeletal organization and membrane trafficking. The Fyn and Lck Src family tyrosine kinases play a key role in T cell antigen receptor (TCR) signaling. The human Lck gene maps to chromosome 1p35.1 and encodes a 509 amino acid protein.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LCK (human) mapping to 1p35.1; Lck (mouse) mapping to 4 D2.2.

STORAGE

Store Lck (120-226): sc-4039 at -20° C and Lck (120-226) AC: sc-4039 AC at 4° C; stable for one year from the date of shipment.

SOURCE

Lck (120-226) is expressed in *E. coli* as a 38 kDa tagged fusion protein corresponding to amino acids 120-226 of Lck of mouse origin containing the SH2 domain.

PRODUCT

Lck (120-226) is purified from bacterial lysates (>98%) by glutathione agarose chromatography and supplied as 50 µg purified protein in PBS containing 5 mM DTT and 50% glycerol.

Also available in agarose conjugate format; 100 µg purified Lck (120-226) protein conjugated to 0.1 ml agarose in PBS containing 0.1% azide, 0.1% BSA and 10% glycerol: Lck (120-226) AC: sc-4039 AC.

APPLICATIONS

Lck (120-226) in its soluble, non-conjugated form (sc-4039) is recommended for purification of target proteins containing appropriate phosphotyrosine binding sites when used in combination with glutathione agarose (sc-2009).

Alternatively, the agarose conjugated form of this product (sc-4039 AC) can be used directly for target protein binding.

Molecular Weight of Lck: 56 kDa.

SELECT PRODUCT CITATIONS

1. Lee-Fruman, K.K., Collins, T.L. and Burakoff, S.J. 1996. Role of the Lck Src homology 2 and 3 domains in protein tyrosine phosphorylation. *J. Biol. Chem.* 271: 25003-25010.
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RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.