



Fyn (85-139): sc-4041

BACKGROUND

Src is the human homolog of the v-Src gene of the Rous sarcoma virus, also called 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 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. Fyn and Lck kinases play a key role in T-cell antigen receptor (TCR) signaling. The human Fyn gene maps to chromosome 6q21 and encodes a 537 amino acid protein.

REFERENCES

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3. Williams, J.C., et al. 1998. Insights into Src kinase functions: structural comparisons. *Trends Biochem. Sci.* 23: 179-184.
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5. Borge, J.D., et al. 2000. Selected glimpses into the activation and function of Src kinase. *Oncogene* 19: 5620-5635.
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7. Gilmore, E.S., et al. 2001. Src family kinases mediate epithelial Na⁺ channel inhibition by endothelin. *J. Biol. Chem.* 276: 42610-42617.
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9. LocusLink Report (LocusID: 4067). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: FYN (human) mapping to 6q21; Fyn (mouse) mapping to 10 B1.

SOURCE

Fyn (85-139) is expressed in *E. coli* as a 33 kDa tagged fusion protein corresponding to amino acids 85-139 of Fyn of mouse origin containing the SH3 domain.

RESEARCH USE

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

PRODUCT

Fyn (85-139) 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 Fyn (85-139) protein conjugated to 0.1 ml agarose in PBS containing 0.1% azide, 0.1% BSA and 10% agarose: Fyn (85-139) AC: sc-4041 AC.

APPLICATIONS

Fyn (85-139) (sc-4041) is recommended for purification of target proteins containing appropriate proline-rich sequences when used in combination with glutathione agarose (sc-2009).

Fyn (85-139) AC (sc-4041 AC) is recommended for target protein binding.

Molecular Weight of Fyn: 59 kDa.

SELECT PRODUCT CITATIONS

1. Sadoshima, J. and Izumo, S. 1996. The heterotrimeric G_q protein-coupled Angiotensin II receptor activates p21 ras via the tyrosine kinase-Shc-Grb2-Sos pathway in cardiac myocytes. *EMBO J.* 15: 775-787.
2. Weyrich, A.S., et al. 1998. Signal-dependent translation of a regulatory protein, Bcl-3, in activated human platelets. *Proc. Natl. Acad. Sci. USA* 95: 5556-5561.
3. Martinez, M.C., et al. 2003. Dual regulation of neuronal morphogenesis by a δ -catenin-cortactin complex and Rho. *J. Cell Biol.* 162: 99-111.
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STORAGE

Store Fyn (85-139): sc-4041 at -20° C and Fyn (85-139) AC: sc-4041 AC at 4° C; stable for one year from the date of shipment.

PROTOCOLS

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