

Fyn (85-247): sc-4040

BACKGROUND

The oncogene family of protein tyrosine kinases contains many members, the viral members of which have been shown to be derived from distinct cellular genes. This gene family contains the normal cellular and altered versions of many genes that encode cell surface receptors for growth factors or cell surface receptors that are part of large receptor complexes (non-receptor protein kinases). The Fyn gene product was originally identified as a 537 residue protein, p59, which is 86% identical to the chicken proto-oncogene product, c-Src p60, and was named *Slk* (Src-like kinase). Fyn has been shown to associate with middle T antigen in murine polyomavirus-transformed cells. There are two different forms of Fyn mRNA that arise by mutually exclusive splicing of alternative seventh exons. One of these products, p59Fyn(B) is found in high levels in the brain. The other form, p59Fyn(T), is expressed preferentially in T lymphocytes. Data has shown the Fyn gene product to be involved in T cell activation through the T cell receptor by its association with the CD3 molecule.

REFERENCES

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CHROMOSOMAL LOCATION

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

SOURCE

Fyn (85-247) is expressed in *E. coli* as a 47 kDa tagged fusion protein corresponding to amino acids 85-247 of Fyn of mouse origin containing SH3-SH2 domains.

STORAGE

Store Fyn (85-247): sc-4040 at -20° C and Fyn (85-247) AC: sc-4040 AC at 4° C; stable for one year from the date of shipment.

PRODUCT

Fyn (85-247) 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 (85-247) protein conjugated to 0.1 ml agarose in PBS containing 0.1% azide, 0.1% BSA and 10% agarose: Fyn (85-247) AC: sc-4040 AC.

APPLICATIONS

Fyn (85-247) in its soluble, non-conjugated form (sc-4040) is recommended for purification of target proteins containing appropriate proline-rich sequences and/or phosphotyrosine binding sites when used in combination with glutathione agarose (sc-2009). Fyn (85-247) is also recommended as a Western blotting control for sc-434.

Alternatively, the agarose conjugated form of this product (sc-4040 AC) can be used directly for target protein binding.

SELECT PRODUCT CITATIONS

1. Briggs, S., Bryant, S.S., Jove, R., Sanderson, S.D. and Smithgall, T.E. 1995. The Ras GTPase-activating protein (GAP) is an SH3 domain-binding protein and substrate for the Src-related tyrosine kinase, Hck. *J. Biol. Chem.* 270: 14718-14724.
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3. Zamora-Leon, S.P., Lee, G., Davies, P. and Shafit-Zagardo, B. 2001. Binding of Fyn to MAP-2c through an SH3 binding domain. Regulation of the interaction by ERK 2. *J. Biol. Chem.* 276: 39950-39958.

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.