

p-Fyn (Thr 12): sc-16848

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.

CHROMOSOMAL LOCATION

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

SOURCE

p-Fyn (Thr 12) is available as either goat (sc-16848) or rabbit (sc-16848-R) affinity purified polyclonal antibody raised against a short amino acid sequence containing Thr 12 phosphorylated Fyn of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-16848 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-Fyn (Thr 12) is recommended for detection of Thr 12 phosphorylated Fyn of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p-Fyn (Thr 12) is also recommended for detection of correspondingly phosphorylated Fyn in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Fyn siRNA (h): sc-29321, Fyn siRNA (m): sc-35425, Fyn shRNA Plasmid (h): sc-29321-SH, Fyn shRNA Plasmid (m): sc-35425-SH, Fyn shRNA (h) Lentiviral Particles: sc-29321-V and Fyn shRNA (m) Lentiviral Particles: sc-35425-V.

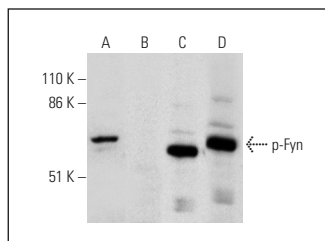
Molecular Weight of p-Fyn: 59 kDa.

Positive Controls: mouse brain extract: sc-2253.

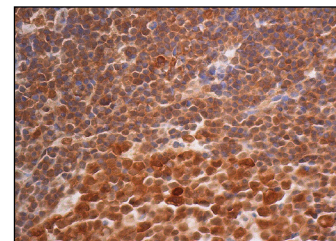
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Western blot analysis of Fyn phosphorylation in untreated (**A, C**) and lambda protein phosphatase (sc-200312A) treated (**B, D**) mouse brain tissue extracts. Antibodies tested include p-Fyn (Thr 12)-R: sc-16848-R (**A, B**) and Fyn (H-80): sc-28791 (**C, D**).



p-Fyn (Thr 12)-R: sc-16848-R. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing cytoplasmic and nuclear staining of cells in germinal and non-germinal centers.

SELECT PRODUCT CITATIONS

- Nakahara, J., et al. 2003. Signaling via immunoglobulin Fc receptors induces oligodendrocyte precursor cell differentiation. *Dev. Cell* 4: 841-852.
- He, Z., et al. 2005. Regulation of ultraviolet B-induced phosphorylation of histone H3 at Serine 10 by Fyn kinase. *J. Biol. Chem.* 280: 2446-2454.
- Löwenberg, M., et al. 2005. Rapid immunosuppressive effects of glucocorticoids mediated through Lck and Fyn. *Blood* 106: 1703-1710.
- Falk, J., et al. 2005. Dual functional activity of semaphorin 3B is required for positioning the anterior commissure. *Neuron* 48: 63-75.
- Löwenberg, M., et al. 2006. Kinome analysis reveals nongenomic glucocorticoid receptor-dependent inhibition of Insulin signaling. *Endocrinology* 147: 3555-3562.
- He, Z., et al. 2008. Fyn is a novel target of (-)-epigallocatechin gallate in the inhibition of JB6 Cl41 cell transformation. *Mol. Carcinog.* 47: 172-183.
- Randriamboavonjy, V., et al. 2010. AMPK α 2 subunit is involved in platelet signaling, clot retraction, and thrombus stability. *Blood* 116: 2134-2140.
- Barabutis, N., et al. 2013. LPS induces pp60c-src-mediated tyrosine phosphorylation of Hsp90 in lung vascular endothelial cells and mouse lung. *Am. J. Physiol. Lung Cell. Mol. Physiol.* 304: L883-L893.

RESEARCH USE

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


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Try **p-Fyn (D-1): sc-377555**, our highly recommended monoclonal alternative to p-Fyn (Thr 12).