

syncollin (17): sc-136442

BACKGROUND

Syncollin (SYCN), also known as SYL, INSSA1 or Insulin synthesis-associated protein 1, is a 134 amino acid protein expressed in pancreatic acinar cells. Localizing to secretory vesicle membranes of cytoplasmic vesicles and the luminal side of peripheral membranes, syncollin plays a role in exocytosis and is thought to influence maturation or concentration of zymogens in zymogen granules. The gene encoding syncollin maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

1. Teglund, S., Olsen, A., Khan, W.N., Frängsmyr, L. and Hammarström, S. 1994. The pregnancy-specific glycoprotein (PSG) gene cluster on human chromosome 19: fine structure of the 11 PSG genes and identification of 6 new genes forming a third subgroup within the carcinoembryonic antigen (CEA) family. *Genomics* 23: 669-684.
2. Wang, L., Lin, S.H., Wu, W.G., Kemp, B.L., Walsh, G.L., Hong, W.K. and Mao, L. 2000. C-CAM1, a candidate tumor suppressor gene, is abnormally expressed in primary lung cancers. *Clin. Cancer Res.* 6: 2988-2993.
3. Trowsdale, J., Barten, R., Haude, A., Stewart, C.A., Beck, S. and Wilson, M.J. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
4. Antonin, W., Wagner, M., Riedel, D., Brose, N. and Jahn, R. 2002. Loss of the zymogen granule protein syncollin affects pancreatic protein synthesis and transport but not secretion. *Mol. Cell. Biol.* 22: 1545-1554.
5. Leeb, T. and Müller, M. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. *Gene* 343: 239-244.
6. Barrow, A.D. and Trowsdale, J. 2008. The extended human leukocyte receptor complex: diverse ways of modulating immune responses. *Immunol. Rev.* 224: 98-123.

CHROMOSOMAL LOCATION

Genetic locus: Sync (mouse) mapping to 7 A3.

SOURCE

syncollin (17) is a mouse monoclonal antibody raised against a peptide mapping at the C-terminus of syncollin of rat origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

syncollin (17) is available conjugated to agarose (sc-136442 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-136442 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136442 PE), fluorescein (sc-136442 FITC), Alexa Fluor® 488 (sc-136442 AF488), Alexa Fluor® 546 (sc-136442 AF546), Alexa Fluor® 594 (sc-136442 AF594) or Alexa Fluor® 647 (sc-136442 AF647), 200 µg/ml, for WB (RGB), IF and IHC(P); and to either Alexa Fluor® 680 (sc-136442 AF680) or Alexa Fluor® 790 (sc-136442 AF790), 200 µg/ml, for Near-Infrared (NIR) WB and IF.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

syncollin (17) is recommended for detection of syncollin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for syncollin siRNA (m): sc-153985, syncollin shRNA Plasmid (m): sc-153985-SH and syncollin shRNA (m) Lentiviral Particles: sc-153985-V.

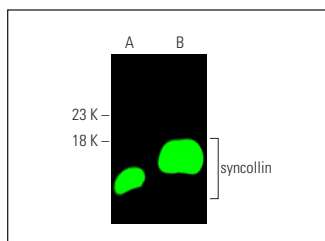
Molecular Weight of syncollin: 16 kDa.

Positive Controls: rat pancreas extract: sc-364806, mouse pancreas extract: sc-364244 or mouse spleen extract: sc-2391.

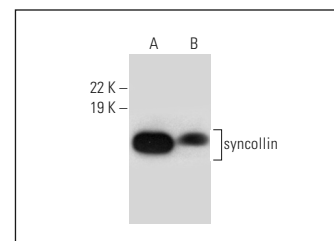
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



syncollin (17): sc-136442. Near-infrared western blot analysis of syncollin expression in mouse pancreas (A) and rat pancreas (B) tissue extracts. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.



syncollin (17): sc-136442. Western blot analysis of syncollin expression in mouse pancreas (A) and mouse spleen (B) tissue extracts.

RESEARCH USE

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