



APS (H-120): sc-25551

BACKGROUND

APS (adapter molecule containing PH and SH2 domains), SH2-B and Lnk compose a family of adapter proteins which contain a Pleckstrin homology (PH) domain, an SH2 domain and a tyrosine phosphorylation site. Stimulation of B cell receptor (BCR) or T cell receptor (TCR) results in the phosphorylation of the immunoreceptor tyrosine-based activation motif (ITAM) of BCR, TCR and several substrates. APS, SH2-B and Lnk may bind to the ITAM domain of BCR and TCR. Lnk is tyrosine phosphorylated in response to TCR stimulation and APS has been shown to be tyrosine phosphorylated in response to BCR stimulation.

REFERENCES

1. Osborne, M.A., Dalton, S., and Kochan, J.P. 1995. The yeast system-genetic detection of *trans*-phosphorylated ITAM-SH2-interactions. *Biotechnology* 13: 1474-1478.
2. Huang, X., et al. 1995. Cloning and characterization of Lnk, a signal transduction protein that links T cell receptor activation signal to phospholipase $\text{C}\gamma 1$, Grb2, and phosphatidylinositol 3-kinase. *Proc. Natl. Acad. Sci. USA* 92: 11618-11622.
3. Daeron, M., et al. 1995. The same tyrosine-based inhibition motif, in the intracytoplasmic domain of $\text{Fc}\gamma\text{RIIb}$, regulates negatively BCR-, TCR- and FcR -dependent cell activation. *Immunity* 3: 635-646.
4. Takaki, S., et al. 1997. Characterization of Lnk. An adaptor protein expressed in lymphocytes. *J. Biol. Chem.* 272: 14562-14570.
5. Yokouchi, M., et al. 1997. Cloning and characterization of APS, an adaptor molecule containing PH and SH2 domains that is tyrosine phosphorylated upon B cell receptor stimulation. *Oncogene* 15: 7-15.

CHROMOSOMAL LOCATION

Genetic locus: APS (human) mapping to 7q22; Aps (mouse) mapping to 8 B1-B3.

SOURCE

APS (H-120) is a rabbit polyclonal antibody raised against amino acids 291-410 mapping within an internal region of APS of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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 or our catalog for detailed protocols and support products.

APPLICATIONS

APS (H-120) is recommended for detection of APS of mouse, rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for APS siRNA (h): sc-29710 and APS siRNA (m): sc-40329.

Molecular Weight of APS: 89 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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