

# Lnk (F-9): sc-514025

## 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., et al. 1995. The yeast tribrid system—genetic detection of *trans*-phosphorylated ITAM-SH2 interactions. *Biotechnology* 13: 1474-1478.
2. Daeron, M., et al. 1995. The same tyrosine-based inhibition motif, in the intracytoplasmic domain of Fc  $\gamma$  RIIB, regulates negatively BCR-, TCR-, and FcR-dependent cell activation. *Immunity* 3: 635-646.
3. Huang, X., et al. 1995. Cloning and characterization of Lnk, a signal transduction protein that links T-cell receptor activation signal to phospholipase C  $\gamma$ 1, Grb2, and phosphatidylinositol 3-kinase. *Proc. Natl. Acad. Sci. USA* 92: 11618-11622.
4. 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.
5. Takaki, S., et al. 1997. Characterization of Lnk. An adaptor protein expressed in lymphocytes. *J. Biol. Chem.* 272: 14562-14570.

## CHROMOSOMAL LOCATION

Genetic locus: Sh2b3 (mouse) mapping to 5 F.

## SOURCE

Lnk (F-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 281-309 at the C-terminus of Lnk of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $\gamma$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514025 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## 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](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

Lnk (F-9) is recommended for detection of Lnk of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 Lnk siRNA (m): sc-40331, Lnk shRNA Plasmid (m): sc-40331-SH and Lnk shRNA (m) Lentiviral Particles: sc-40331-V.

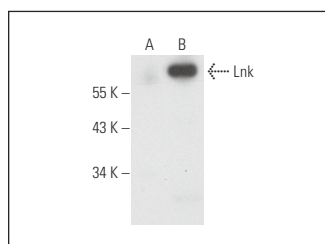
Molecular Weight of Lnk: 68 kDa.

Positive Controls: Lnk (m): 293T Lysate: sc-121364.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Lnk (F-9): sc-514025. Western blot analysis of Lnk expression in non-transfected: sc-117752 (A) and mouse Lnk transfected: sc-121364 (B) 293T whole cell lysates.

## RESEARCH USE

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