

Sab (E-18): sc-10167

BACKGROUND

Sab is a Src homology three domain (SH3) binding protein that preferentially associates with Bruton's tyrosine kinase, Btk, over other related tyrosine kinases. Btk, together with Itk, Tec, Txk, and Bmx, is a member of a family of cytoplasmic tyrosine kinases (the Btk/Tec family). Btk is a B cell specific kinase that is crucial for human and murine B cell development, and its deficiency causes human X-linked agammaglobulinemia and murine X-linked immunodeficiency. Sab serves as a negative regulator of Btk kinase activity and Sab binding to Btk reduces the phosphorylation of Btk substrates and also inhibits Btk-induced auto-phosphorylation in B cells. The SH3 domain of Sab directly binds to the SH3 domain of Btk and this interaction is essential for the regulatory activity of Sab. Sab is more broadly expressed than Btk, suggesting that Sab may target additional protein kinases that are specific to various tissues.

CHROMOSOMAL LOCATION

Genetic locus: SH3BP5 (human) mapping to 3p25.1; Sh3bp5 (mouse) mapping to 14 B.

SOURCE

Sab (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sab 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.

Blocking peptide available for competition studies, sc-10167 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Sab (E-18) is recommended for detection of Sab 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).

Sab (E-18) is also recommended for detection of Sab in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Sab siRNA (h): sc-106528, Sab siRNA (m): sc-153196, Sab shRNA Plasmid (h): sc-106528-SH, Sab shRNA Plasmid (m): sc-153196-SH, Sab shRNA (h) Lentiviral Particles: sc-106528-V and Sab shRNA (m) Lentiviral Particles: sc-153196-V.

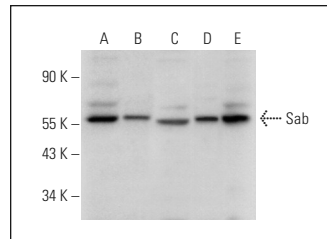
Molecular Weight of Sab: 70 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, K-562 whole cell lysate: sc-2203 or F9 cell lysate: sc-2245.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Sab (E-18): sc-10167. Western blot analysis of Sab expression in Raji (A), A-431 (B), K-562 (C), F9 (D) and OVCAR-3 (E) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Tucker, K.L., et al. 2009. Proteomic analysis of resting and thrombin-stimulated platelets reveals the translocation and functional relevance of HIP-55 in platelets. *Proteomics* 9: 4340-4354.

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.


 MONOS
Satisfaction
Guaranteed

Try **Sab (A-3): sc-390512** or **Sab (PL-A23): sc-135617**, our highly recommended monoclonal alternatives to Sab (E-18).