ANTIBODIES

Product Information Sheet

# ANTI-MOUSE SHIP

Protein A Purified Rabbit Polyclonal Antibody

Catalog #01506 0.2 mL

## SCIENTIFIC BACKGROUND:

SHIP (SH2 containing inositol 5' phosphatase) is a hematopoietic-restricted 145 kDa protein that becomes tyrosine phosphorylated and associated with the adaptor protein, Shc, following cytokine, growth factor, chemokine and immuno-receptor stimulation. SHIP hydrolyzes the critical phosphatidylinositol (PI)-3-kinase (PI3K)-generated second messenger, PI-3,4,5-$P_3$ ($PIP_3$), to PI-3,4-$P_2$ [1,3] and therefore acts as an important negative regulator of the PI3K pathway.

## SPECIFICITY:

This antibody reacts with mouse full length SHIP, 145 kDa protein, as well as the C-terminal truncated 135, 125 and 110 kDa forms.[2]

## IMMUNOGEN:

This rabbit polyclonal antibody was generated against a GST fusion protein corresponding to residues 7-133 of mouse SHIP.

## FORMAT:

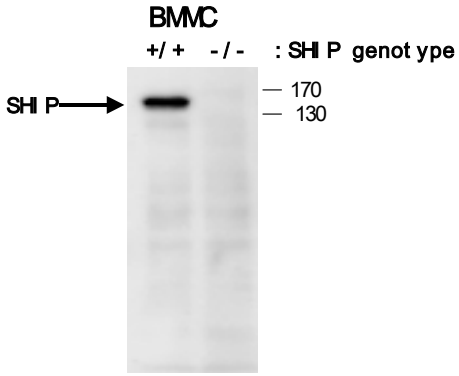
200 µg of protein A purified rabbit polyclonal antisera in 0.2 mL of 0.1M Tris-glycine, pH 7.0, 0.05% sodium azide.

## STABILITY AND STORAGE:

This antibody can be stored at -20ºC to -70ºC for up to 2 years without detectable loss of activity. For optimal storage, aliquot into smaller portions and store at -20ºC to -70ºC to avoid repeated freeze thawing.

## IMMUNOBLOT ANALYSIS:

Representative Western Blot of mouse bone marrow derived mast cells (BMMCs) from normal (+/+) and SHIP knockout (-/-) mice resolved by electrophoresis, transferred to a PDVF membrane (Immobilon – Millipore, Nepean, ON) and probed with anti-SHIP (1:4000 dilution). Proteins were visualized using goat anti-rabbit secondary antibody conjugated to horseradish peroxidase (HRP) and a chemiluminescence detection system. Arrow indicates SHIP (145 kDa).




## APPLICATIONS AND DIRECTIONS FOR USE:

Centrifuge tube briefly before use to ensure recovery of entire contents. This antibody should be diluted into an appropriate buffer containing 0.1% sodium azide for use or 0.1% sodium azide should be added directly to the antibody contents for storage at 2°C-8°C. This antibody is stable for at least one month when stored at 2°C-8°C.

Western Blot:
This antibody can be used at a 1 in 4000 dilution with the appropriate secondary antibody to detect mouse SHIP. SHIP +/+ and -/- BMMC lysates are available as positive and negative controls, respectively. Please inquire about availability.

Immunoprecipitation:
This antibody can be used at a concentration of 2 µL in 500 µl of cell lysate from $2.5x10^7$ hematopoietic cells. Incubate for 1 hour at 4°C before adding 10 µL of a 50% slurry of immobilized Protein A to isolate mouse SHIP protein from the cell lysates.

## REFERENCE:

1. Damen, JE *et al*, Proc Natl Acad Sci. 93(4):1689-93, 1996.

2. Damen, JE *et al*, Blood. 92(4):1199-205, 1998.

3. Sly, LM *et al*, Exp Hematol. 31(12):1170-81, 2003.

**THIS REAGENT IS FOR RESEARCH USE ONLY. IT IS NOT TO BE ADMINISTERED TO HUMANS.**

***Hazardous Ingredient: Sodium Azide.*** *Avoid exposure to skin and eyes, ingestion, and contact with heat, acids and metals. Wash exposed skin with soap and water. Flush eyes with water. Dilute with running water before discharging into plumbing*

**StemCell Technologies**

**In North America**
Tel: 1.604.877.0713
Fax: 1.604.877.0704
Toll Free Tel: 1.800.667.0322
Toll Free Fax: 1.800.567.2899
e-mail: info@stemcell.com
**www.stemcell.com**

**In the United Kingdom**
Tel: +44.(0).20.7537.7565
Fax: +44.(0).20.7515.5408
Toll Free within United Kingdom
Tel: 0800.731.27.14
Fax: 0800.731.27.13
e-mail: info@stemcellgb.com
**www.stemcellgb.com**

**In Europe**
Tel: +33.(0).4.76.04.75.30
Fax: +33.(0).4.76.18.99.63
e-mail: info@stemcellfrance.com

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