

SCIENTIFIC BACKGROUND:

SHIP2 (SH2 containing inositol 5' phosphatase) is a SHIP-related protein expressed in both hematopoietic and non-hematopoietic cells. Like SHIP, SHIP2 becomes tyrosine phosphorylated and associated with the adaptor protein, Shc, following cytokine, growth factor, chemokine and immunoreceptor stimulation. SHIP2 also hydrolyzes the critical phosphatidylinositol (PI)-3-kinase (PI3K)-generated second messenger, PI-3,4,5-P₃ (PIP₃), to PI-3,4-P₂^{1,2} and therefore acts as an important negative regulator of the PI3K pathway.

SPECIFICITY:

This antibody reacts with both mouse and human SHIP2, 145 kDa protein.

IMMUNOGEN:

This rabbit polyclonal antibody was generated against an 18 amino acid peptide corresponding to the C-terminus of human SHIP2.

FORMAT:

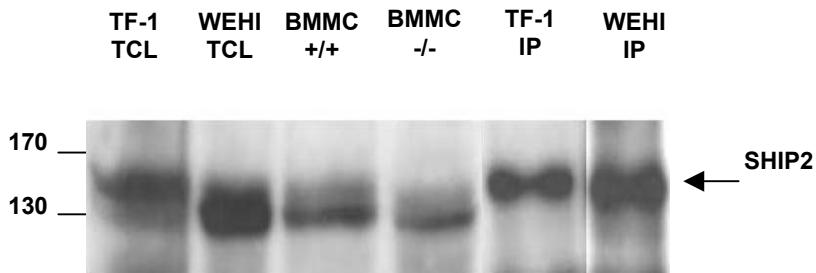
0.1 mL of immunogen-affinity purified rabbit polyclonal antibody in 0.01% BSA, 0.05% sodium azide and 50% glycerol (pH 7.4).
Liquid at -20°C.

STABILITY AND STORAGE:

Anti-SHIP2 can be stored at -20°C to -70°C for up to 2 years without detectable loss of activity.

IMMUNOBLOT ANALYSIS:

Representative Western Blot of total cell lysates (5 x 10⁵ cells) from mouse bone marrow derived mast cells (BMMCs) from SHIP^{+/+} and SHIP^{-/-} mice, WEHI 231 B cell as well as human TF-1 cells resolved by electrophoresis, transferred to a PDVF membrane (Immobilon – Millipore, Nepean, ON) and probed with anti-SHIP2 (1:1000 dilution). The last two lanes represent anti-SHIP2 immunoprecipitates of 1 x 10⁷ TF1 and WEHI cells, respectively. Proteins were visualized using goat anti-rabbit secondary antibody conjugated to horseradish peroxidase (HRP) and a chemiluminescence detection system. Arrow indicates SHIP2 (145 kDa).



Product Information Sheet

ANTI-SHIP2

ANTIBODIES



Affinity Purified Rabbit
Polyclonal Antibody

Catalog #01508

0.1 mL

APPLICATIONS AND DIRECTIONS FOR USE:

Centrifuge tube briefly before use to ensure recovery of entire contents.

Western Blot:

This antibody can be used at a 1 in 1000 dilution with the appropriate secondary reagents to detect mouse and human SHIP2.

Immunoprecipitation:

Use 4 µL of this antibody per 500 µL of cell lysate from 10⁶ cells. Incubate for 1 hour at 4°C before adding 10 µL of a 50% slurry of immobilized Protein A to isolate SHIP2 protein from the cell lysates.

REFERENCES:

1. Pesesse, X., et. al., Biochem. Biophys. Res. Commun. 239: 697-700, 1997.
2. Muraille, E., et. al., Biochem. J. 342:697-705, 1999.

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.

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