



## SHIP-1 (1-105): sc-4247 WB

### BACKGROUND

The major translational product of the v-Fms oncogene, originally isolated from the McDonough strain of feline sarcoma virus, has been identified as a 170 kDa glycoprotein with intrinsic tyrosine kinase activity. The v-Fms human cellular homolog, c-Fms, has been molecularly cloned and mapped to band q34 on chromosome 5, and identified as the receptor for hematopoietic ligand CSF-1. Ligand-induced activation of the intrinsic CSF-1R protein tyrosine kinase triggers its interaction with cytoplasmic effector molecules. One such effector molecule, SHIP-1 (for SH2-containing-inositol phosphatase) p145, associates with activated Fms. SHIP-1 contains two phosphotyrosine-binding domains (PTB), a unique amino terminal SH2 domain, a proline-rich region, and two highly conserved motifs found among inositol phosphate 5-phosphatases. SHIP-1 displays both phosphatidylinositol 3,4,5-triphosphate and inositol 1,3,4,5-tetrakisphosphate polyphosphate 5-phosphatase activity. Evidence suggests that SHIP-1 may modulate Ras signaling in addition to inositol signaling pathways.

### REFERENCES

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### SOURCE

SHIP-1 (1-105) is expressed in *E. coli* as a 38 kDa tagged fusion protein corresponding to amino acids 1-105 mapping at the amino terminus of SHIP-1 of mouse origin.

### PRODUCT

SHIP-1 (1-105) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

### APPLICATIONS

SHIP-1 (1-105) is suitable as a Western blotting control for sc-1963 and sc-6244.

### STORAGE

Store at -20° C; stable for one year from the date of shipment.

### RESEARCH USE

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