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Product Information

Anti-SIRPα1(SHPS-1)
produced in rabbit, IgG fraction of antiserum

Catalog Number **S1311**

Product Description

Anti-SIRPα1(SHPS-1) is produced in rabbit using as immunogen a fusion protein corresponding to the cytoplasmic domain of rat SHPS-1 (residues 418-481). The antibody is purified using protein A.

Anti-SIRPα1(SHPS-1) recognizes the differentially glycosylated forms of SIRPα1(SHPS-1) of 130, 100 and 65 kDa. It also detects a single band at 50 kDa. The antibody cross-reacts with rat and mouse. It may be used for immunoblotting and immunoprecipitation.

SHPS-1 belongs to an emerging family of proteins named signal regulatory proteins or SIRPS.[1] They consist of two subtypes distinguished by the presence or absence of a cytoplasmic SHP-2 binding domain.[1] SHPS-1 may be a direct substrate for both tyrosine kinases, such as the insulin receptor kinase or Src, and a specific docking protein for SH2-domain containing PTPases.[2] SIRPα1(SHPS-1) begins tyrosine phosphorylation in response to various mitogens or cell adhesion.[1] Once phosohorylated, SHPS-1 binds to the SH2 domain of SHP-2.[1] It has been demonstrated that the 85 kDa mannose -rich glycoprotein component contained the SHP-1 substrate for phosphotyrosine phosphatases.[3]

Reagents

Supplied as a solution in 0.1M Tris-glycine, pH 7.4, 0.15M NaCl, and 0.05% sodium azide.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Immunoblotting: the recommended dilution is 4 µg/ml using RIPA lysates from mouse M1 myeloblast cells, goat anti-rabbit IgG peroxidase conjugate and chemiluminescent detection.

Note: In order to obtain best results and assay sensitivity in different techniques and preparations, we recommend determining optimal working dilutions by titration test.

References

1. Kharitonenkov, A., et al., *Nature*, **386**, 181-186 (1997).
2. Fujioka, Y., et al., *Mol. Cell Biol.,* **16**, 6887-6899 (1996).
3. Bartoszewicz, Z., et al., *J Neurochem*., **72**, 1688-1693 (1999).

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