



Product Information

MONOCLONAL ANTI-v-Src Clone 327 Purified Mouse Immunoglobulin

Product Number **S 1686**

Product Description

Monoclonal Anti-v-Src (mouse IgG1 κ isotype) is derived from the hybridoma produced by the fusion of P3X63 Ag8.653 mouse myeloma cells with splenocytes from an immunized BALB/c mouse. Purified Src protein (pp60^{src}) was used as immunogen.¹ The antibody is purified using Protein A or Protein G.

Monoclonal Anti-v-Src reacts with active Src kinase from human, mouse, and rat by immunoprecipitation, and immunoblotting,^{1,2} detecting a band of approximately 56 kDa. The antibody is not recommended for immunohistochemistry.

Members of the Src family are intracellular, membrane-associated, non-receptor tyrosine kinases. They transduce signals from transmembrane receptors to intracellular components. Multiple pathways can be stimulated upon Src activation that can lead to a variety of cellular responses including differentiation and proliferation. All Src family members have the same basic structure: an amino terminal Src homology 4 domain (SH4), containing a myristylation signal sequence essential for membrane localization; conserved SH3 and SH2 domains, which mediate protein-protein interactions, separated from the SH4 by a unique region; a catalytic kinase domain in the C-terminal half of the protein; and a short C-terminal tail that negatively regulates the kinase activity.³

The major translation product of the avian Rous sarcoma virus has been designated pp60^{src} and possesses the characteristic protein tyrosine kinase activity.^{4,5} The mammalian cellular homolog of pp60^{src} is designated pp60^{c-src}.^{6,7} pp60^{c-src} is normally suppressed by phosphorylation at its C-terminus by a kinase, CSK. pp60^{c-src} can be activated by mutation or by various stimuli such as interaction with polyoma virus-encoded middle T antigen.⁸⁻¹⁰ Immunoprecipitates of middle T antigen also contain phosphatidylinositol kinase activity coinciding with the presence of a 81 kDa (p81) protein.^{10,11} p81 is phosphorylated by activated pp60^{c-src} and is thought to be the phosphatidylinositol kinase.¹⁰

Reagents

Monoclonal Anti-v-Src is supplied as 100 μ g of purified, lyophilized antibody with 100 μ g of bovine serum albumin.

Storage/Stability

Store at 2-8 °C. Do not freeze. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

After reconstitution, store at 2-8 °C with the addition of 15 mM sodium azide, or freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in a "frost-free" freezer is not recommended.

Reconstitution

Resuspend the lyophilized antibody with 1 ml sterile phosphate buffered saline, pH 7.4, or sterile 20 mM Tris containing 0.15 M NaCl, pH 7.4 to yield a final concentration of 100 μ g/ml. Lyophilized antibodies should be resuspended at 4 °C with occasional gentle mixing for at least two hours.

Product Profile

The recommended antibody concentration is 2-5 μ g/ml for immunoblotting using a COLO201 cell extract and chemiluminescence detection.

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

References

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