

Product Information

Anti-Sam68 (N-terminal)

produced in rabbit, IgG fraction of antiserum

Product Number **S9450**

Product Description

Anti-Sam68 (N-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the N-terminal of human Sam68 (Gene ID: 10657) conjugated to KLH. The corresponding sequence differs by one amino acid in mouse and rat. IgG fraction of antiserum is purified from whole antiserum using protein A immobilized on agarose.

Anti-Sam68 (N-terminal) recognizes human Sam68. The antibody may be used in several immunochemical techniques including immunoblotting (~68 kDa). Detection of the Sam68 band by immunoblotting is specifically inhibited with the immunizing peptide.

Sam68 (also known as Src-associated in mitosis 68 kDa protein, KHDR1, and KHDRBS1), originally identified as the only known substrate for Src-family tyrosine kinases during mitosis,^{1,2} is a member of the STAR (signal transducer and activator of RNA) family of RNA-binding proteins.² Although the calculated molecular mass of Sam68 is 49 kDa, it has been shown to migrate at 68 kDa, and thus called Sam68.¹

Sam68 is implicated in a number of cellular processes including signal transduction, transcription, RNA metabolism, cell cycle regulation, and apoptosis.³ Sam68 contains a KH (hnRNP K homology) RNA-binding domain located within a larger domain of 200 amino acids with RNA binding activity named GSG (GRP33/Sam68/GLD-1) domain. Besides binding to RNA and its modulator proteins, Sam68 contains proline-rich motifs and multiple potential tyrosine phosphorylation sites that are involved in the binding to proteins with Src homology 3 (SH3) and SH2 domains.⁴

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20 °C. For continuous use, the product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody dilution of 1:500-1:1000 is recommended using K562 lysates.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Fumagalli, S. et al., *Nature*, **368**, 871-874 (1994).
2. Lukong, K.E., and Richard, S., *Biochim. Biophys. Acta*, **1653**, 73-86 (2003).
3. Rajan, P. et al., *Biochem. Soc. Trans.*, **36**, 505-507 (2008).
4. Najib, S. et al., *Cell. Mol. Life Sci.*, **62**, 36-43 (2005).

VS,SG,TD,KAA,PHC,MAM 06/19-1