

Product Information

Anti-Sam68 (C-terminal)

produced in rabbit, affinity isolated antibody

Product Number **S9575**

Product Description

Anti-Sam68 (C-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a fragment of human Sam68 (Gene ID: 10657) conjugated to KLH. The corresponding sequence differs by one amino acid in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Sam68 (C-terminal) recognizes human Sam68. The antibody may be used in several immunochemical techniques including immunoblotting (~68 kDa), immunoprecipitation, and immunofluorescence. 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.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.

Antibody Concentration: ~1.0 mg/mL

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, or storage in "frost-free" freezers, is 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 concentration of 1-2 µg/mL is recommended using HEK-293T lysates.

Immunoprecipitation: a working antibody amount of 2.5-5 µg is recommended using lysates of K562.

Immunofluorescence: a working antibody concentration of 2-5 µg/mL is recommended using paraformaldehyde fixed HeLa cells.

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 08/19-1