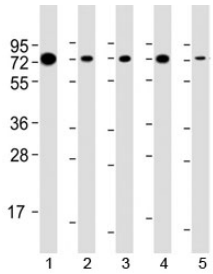
KHDRBS1 Antibody / SAM68 Polyclonal Antibody (F53819)

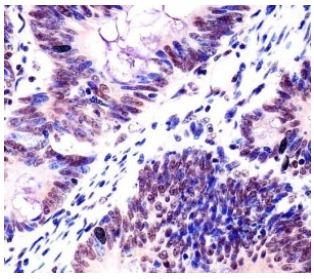
Catalog No.	Formulation	Size
F53819-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F53819-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q07666
Localization	Nuclear
Applications	Western blot: 1:1000-2000 IHC (FFPE): 1:25
Limitations	This KHDRBS1 Antibody / SAM68 Polyclonal Antibody is available for research use only.



KHDRBS1 Antibody WB Analysis of Human Raji, HeLa, Daudi, HT-29 and Mouse NIH3T3 Cell Lysates. Western blot analysis of human Raji (lane 1), HeLa (lane 2), Daudi (lane 3), HT-29 (lane 4), and mouse NIH3T3 (lane 5) cell lysates using SAM68 Polyclonal Antibody at a dilution of 1:2000. An immunoreactive band is detected near 72 kDa across all five samples, above the calculated molecular weight of approximately 48 kDa. SAM68 is known to exhibit an apparent molecular weight of approximately 62-68 kDa on SDS-PAGE.



KHDRBS1 Antibody IHC Staining of Human Colorectal Carcinoma Tissue. Immunohistochemical analysis of FFPE human colorectal carcinoma tissue using SAM68 Polyclonal Antibody at a dilution of 1:25. Brown immunoreactivity is observed in tumor-associated epithelial cells, with predominantly nuclear staining and some cytoplasmic signal. Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer.

Description

KHDRBS1 Antibody / SAM68 Polyclonal Antibody targets KHDRBS1, commonly known as SAM68 (Src-associated in mitosis 68 kDa), an RNA-binding protein that connects intracellular signaling pathways with the regulation of RNA processing. SAM68 belongs to the STAR (signal transduction and activation of RNA) protein family and participates in alternative splicing, transcript regulation, and cellular responses to signaling events. Its ability to interact with both RNA and signaling proteins allows it to influence gene expression at multiple regulatory levels.

SAM68 contains a conserved GSG domain that includes a K homology (KH) RNA-binding domain responsible for recognizing selected RNA sequences. The protein also contains proline-rich regions that interact with SH3 domain-containing proteins and tyrosine residues that undergo phosphorylation by Src-family kinases. These structural features enable SAM68 to integrate signaling activity with RNA-binding functions. Changes in phosphorylation and other post-translational modifications can influence its interactions, localization, and regulatory activity.

Alternative pre-mRNA splicing is one of the best-characterized functions of SAM68. By binding specific RNA sequences and interacting with components of the splicing machinery, SAM68 can promote or inhibit the inclusion of particular exons. Its regulatory effects have been investigated in transcripts involved in apoptosis, proliferation, and cellular differentiation. SAM68-dependent splicing decisions are influenced by cellular signaling conditions and the availability of other RNA-binding proteins.

SAM68 also participates in the regulation of cell-cycle progression and responses to growth factor signaling. Initially identified through its association with Src-family kinases during mitosis, the protein has subsequently been implicated in broader mechanisms connecting phosphorylation-dependent signaling to RNA metabolism. Its functions extend to neuronal development and specialized RNA-processing events, where changes in transcript composition contribute to cellular differentiation and maintenance.

Altered KHDRBS1 expression and activity have been investigated in cancer biology, particularly in relation to abnormal RNA processing and signaling regulation. Depending on the cellular context, SAM68 can influence transcripts associated with cell survival, proliferation, and tumor progression. Its biological effects are shaped by protein interactions, post-translational modifications, and the transcriptional environment.

KHDRBS1 Antibody supports investigations into SAM68 expression and its role in coordinating signaling pathways with RNA processing. Understanding the regulation of this multifunctional protein contributes to research on alternative splicing, cellular differentiation, and the molecular mechanisms linking extracellular signals to changes in gene expression.

For an alternative reagent with knockout validation and broader experimental characterization, explore our SAM68 Antibody targeting KHDRBS1, an RNA-binding protein involved in alternative splicing and cellular signaling.

Application Notes

Titration of the KHDRBS1 Antibody / SAM68 Polyclonal Antibody may be required due to differences in protocols and substrate sensitivity.

Immunogen

A portion of amino acids 259-291 from the human protein was used as the immunogen for the SAM68 / KHDRBS1 antibody.

Storage

Aliquot the SAM68 / KHDRBS1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Src-associated in mitosis 68 kDa protein antibody, Src-associated in mitosis 68 antibody, KH domain-containing RNA-binding signal transduction-associated protein 1 antibody, KHDRBS1 RNA-binding protein antibody, SAM68 RNA-binding protein antibody, STAR family RNA-binding protein antibody, SAM68 splicing regulator antibody, KHDRBS1 splicing regulator antibody, SAM68 signal transduction protein antibody, KHDRBS1 nuclear protein antibody

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