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# KD-Validated Anti-KHDRBS1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1400

## Product Information

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| **Application** | WB, FC, ICC |
| **Primary Accession** | Q07666 |
| **Reactivity** | Rat, Human, Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | 25GB3385 |
| **Calculated MW** | 48227 |
| **Gene Name** | KHDRBS1 |
| **Aliases** | KHDRBS1; KH RNA Binding Domain Containing, Signal Transduction Associated 1; Sam68; Src-Associated In Mitosis 68 KDa Protein; P62; KH Domain-Containing, RNA-Binding, Signal Transduction-Associated Protein 1; P21 Ras GTPase-Activating Protein-Associated P62; GAP-Associated Tyrosine Phosphoprotein P62; FLJ34027; P68; KH Domain Containing, RNA Binding, Signal Transduction Associated 1; GAP-Associated Tyrosine Phosphoprotein P62 (Sam68); SAM68 |
| **Immunogen** | A synthesized peptide derived from human SAM68 |

## Additional Information

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| **Gene ID** | 10657 |
| **Other Names** | KH domain-containing, RNA-binding, signal transduction-associated protein 1, GAP-associated tyrosine phosphoprotein p62, Src-associated in mitosis 68 kDa protein, Sam68, p21 Ras GTPase-activating protein-associated p62, p68, KHDRBS1 (HGNC:18116) |

## Protein Information

**Name** KHDRBS1 ( HGNC:18116)

**Function** Recruited and tyrosine phosphorylated by several receptor systems, for example the T-cell, leptin and insulin receptors. Once phosphorylated, functions as an adapter protein in signal transduction cascades by binding to SH2 and SH3 domain-containing proteins. Role in G2-M progression in the cell cycle. Represses CBP-dependent transcriptional activation apparently by competing with other nuclear factors for binding to CBP. Also acts as a putative regulator of mRNA stability and/or translation rates and mediates mRNA nuclear export. Positively regulates the association of constitutive transport element (CTE)-containing mRNA with large polyribosomes and translation initiation. According to some authors, is not involved in the nucleocytoplasmic export of unspliced (CTE)-containing RNA species according to (PubMed:22253824). RNA-binding protein that plays a role in the

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| | regulation of alternative splicing and influences mRNA splice site selection and exon inclusion. Binds to RNA containing 5'-[AU]UAA- 3' as a bipartite motif spaced by more than 15 nucleotides. Binds poly(A). Can regulate CD44 alternative splicing in a Ras pathway- dependent manner (PubMed:26080397). In cooperation with HNRNPA1 modulates alternative splicing of BCL2L1 by promoting splicing toward isoform Bcl-X(S), and of SMN1 (PubMed:17371836, PubMed:20186123). Can regulate alternative splicing of NRXN1 and NRXN3 in the laminin G-like domain 6 containing the evolutionary conserved neurexin alternative spliced segment 4 (AS4) involved in neurexin selective targeting to postsynaptic partners. In a neuronal activity-dependent manner cooperates synergistically with KHDRBS2/SLIM-1 in regulation of NRXN1 exon skipping at AS4. The cooperation with KHDRBS2/SLIM-1 is antagonistic for regulation of NXRN3 alternative splicing at AS4 (By similarity). |
| **Cellular Location** | Nucleus. Cytoplasm. Membrane Note=Predominantly located in the nucleus but also located partially in the cytoplasm. |
| **Tissue Location** | Ubiquitously expressed in all tissue examined. Isoform 1 is expressed at lower levels in brain, skeletal muscle, and liver whereas isoform 3 is intensified in skeletal muscle and in liver |

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