

KD-Validated Anti-KHDRBS1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1400

Specification

KD-Validated Anti-KHDRBS1 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession Q07666

Reactivity
Clonality
Monoclonal
Isotype
Rat, Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 48 kDa; observed, 68 kDa KDa

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

KD-Validated Anti-KHDRBS1 Rabbit Monoclonal Antibody - Additional Information

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)

KD-Validated Anti-KHDRBS1 Rabbit Monoclonal Antibody - 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 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

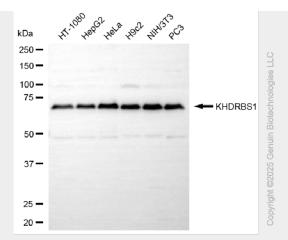
KD-Validated Anti-KHDRBS1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

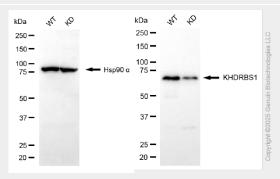
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-KHDRBS1 Rabbit Monoclonal Antibody - Images

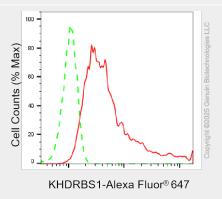




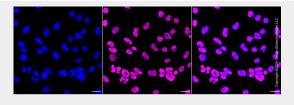
Western blotting analysis using anti-KHDRBS1 antibody (Cat#AGI1400). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-KHDRBS1 antibody (Cat#AGI1400, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-KHDRBS1 antibody (Cat#AGI1400). KHDRBS1 expression in wild type (WT) and KHDRBS1 knockdown (KD) HSHC cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-KHDRBS1 antibody (Cat#AGI1400, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of KHDRBS1 expression in HeLa cells using anti-KHDRBS1 antibody (Cat#AGI1400, 1:2,000). Green, isotype control; red, KHDRBS1.







Immunocytochemical staining of HeLa cells with anti-KHDRBS1 antibody (Cat#AGI1400, 1:1,000). Nuclei were stained blue with DAPI; KHDRBS1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, $20~\mu m$.