# Rabbit anti-Human, Mouse KSR1 Polyclonal Antibody | anti-KSR1 antibody

Phospho-KSR1 (Ser392/406) Antibody

| CATALOG # | HOST | REACTIVITY | APPLICATIONS |
|---|---|---|---|
| **AAA321342** | **Rabbit** | **Human, Mouse** | **Immunohistochemistry, Western Blot** |

## PRODUCT SYNONYMS

KSR1; Polyclonal Antibody; Phospho-KSR1 (Ser392/406) Antibody; BKSR 1; BKSR1; dKsr; EK 31; EK31; hb; Kinase suppressor of Ras 1; Kinase suppressor of ras; KSR 1; KSR; KSR1_HUMAN; Positive Ras signaling mediator family member (86.4 kD); Positive Ras signaling mediator family member; RSU 2; RSU2; SR 31; SR31; Suppressor of activated let 60 Ras SUR3; Suppressor of Ras1 31; anti-KSR1 antibody

## PRODUCT SPECIFICATIONS

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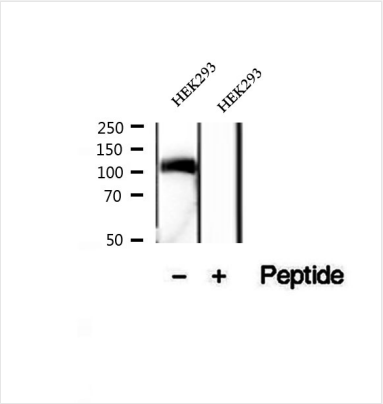
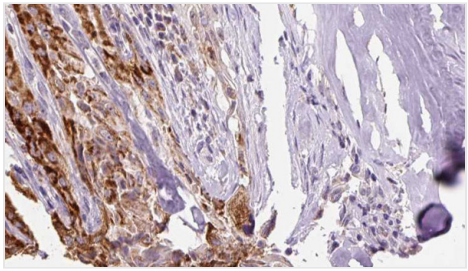
| **Host** | Rabbit |
| **Reactivity** | Human, Mouse |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Specificity** | Phospho-KSR1 (Ser392/406) antibody detects endogenous levels of KSR1. |
| **Purity/Purification** | From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns. |
| **Form/Format** | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| **Concentration** | 1mg/ml (varies by lot) |
| **Sequence Length** | 762 |
| **Applicable Applications for anti-KSR1 antibody** | IHC (Immunohistochemistry), WB (Western Blot) |
| **Immunogen** | A synthesized peptide derived from human KSR1 around the phosphorylation site of Ser392/406. |
| **Subcellular Location** | Endoplasmic Reticulum; Plasma Membrane |
| **Predicted Cross Reactivity** | **Pig, Bovine, Rabbit, Dog, Chicken** |
| **Similarity** | Pig (100%), Bovine (100%), Rabbit (100%), Dog (100%), Chicken (92%) |
| **Conjugation** | Unconjugated |
| **Epitope** | Phospho Ser392, Phospho Ser406 |
| **Preparation and Storage** | Store at -20 degree C. Stable for 12 months from date of receipt. |

## IMAGES




**WB (Western Blot)**
Western blot analysis of extracts of HEK293 cells, using Phospho-KSR1 (Ser392/406) Antibody.



**IHC (Immunohistochemistry)**
AAA321342 at 1/100 staining Human thyroid cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

## ADDITIONAL INFORMATION

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| **Related Product Information for anti-KSR1 antibody** | Function: Scaffolding protein that is part of a multiprotein signaling complex. Promotes phosphorylation of Raf family members and activation of downstream MAP kinases. Promotes activation of MAPK1 and/or MAPK3, both in response to EGF and to cAMP. Does not have kinase activity by itself.<br>Subunit Structure: Interacts with HSP90AA1/HSP90, YWHAE/14-3-3, CDC37, MAP2K1/MEK-1 and MAP2K2/MEK-2 (PubMed:10409742). Interacts with MARK3, PPP2R1A and PPP2CA. Also interacts with RAF and MAPK/ERK, in a Ras-dependent manner. The binding of 14-3-3 proteins to phosphorylated KSR prevents the membrane localization (By similarity). Interacts with isoform 1 of VRK2 (PubMed:20679487). Interacts with AKAP13 and BRAF (PubMed:21102438). Identified in a complex with AKAP13, MAP2K1 and BRAF (By similarity).<br>Post-translational Modifications: Phosphorylated on Ser-311 and, to a higher extent, on Ser-406 by MARK3. Dephosphorylated on Ser-406 by PPP2CA. In resting cells, phosphorylated KSR1 is cytoplasmic and in stimulated cells, dephosphorylated KSR1 is membrane-associated. Phosphorylated by PKA at Ser-888. Phosphorylation at Ser-888 is required for cAMP-dependent activation of MAPK1 and/or MAPK3 (By similarity).<br>Similarity: The protein kinase domain is predicted to be catalytically inactive. The domain is sufficient for KSR1 and KSR1-mediated MAP2K1 and MAP2K2 membrane localization. The domain is required but not sufficient for MAP kinase-mediated inhibition of ELK1 phosphorylation (PubMed:10409742).The protein kinase domain is predicted to be catalytically inactive. The domain is sufficient for KSR1 and KSR1-mediated MAP2K1 and MAP2K2 membrane localization. The domain is required but not sufficient for MAP kinase-mediated inhibition of ELK1 phosphorylation.The N-terminal region mediates interaction with BRAF and with membranes. Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. |

## NCBI AND UNIPROT INFORMATION

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| **NCBI GI #** | 75677325 |
| **NCBI GeneID** | 8844 |
| **NCBI Accession #** | NP_055053.1 |
| **NCBI GenBank Nucleotide #** | NM_014238.1 |
| **UniProt Accession #** | Q8IVT5; Q13476; F8WEA9; H7BYU0 |
| **Molecular Weight** | Observed: 115 kDa<br>Predicted: 103 kDa |
| **NCBI Official Full Name** | kinase suppressor of Ras 1 |
| **NCBI Official Synonym Full Names** | kinase suppressor of ras 1 |
| **NCBI Official Symbol** | KSR1 |
| **NCBI Official Synonym Symbols** | KSR; RSU2 |

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| **NCBI Protein Information** | kinase suppressor of Ras 1 |
| **UniProt Protein Name** | Kinase suppressor of Ras 1 |
| **UniProt Gene Name** | **KSR1** |
| **UniProt Synonym Gene Names** | KSR |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://www.aaabiotech.com/polyclonal/ksr1-antibody-immunohistochemistry-western-blot-elisa/321342