

KSR1 Rabbit pAb

Catalog # AP99426

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8IVT5
Other Accession	Q8IVT5
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	102160
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KSR1
Epitope Specificity	601-750/921
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 protein kinase domain.
SUBUNIT	Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 protein kinase domain.
Post-translational modifications	Phosphorylated on Ser-309 and, to a higher extent, on Ser-404 by MARK3. Dephosphorylated on Ser-404 by PPP2CA. In resting cells, phosphorylated KSR1 is cytoplasmic and in stimulated cells, dephosphorylated KSR1 is membrane-associated (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	KSR1 is a molecular scaffold and positive regulator of the Raf/MEK/ERK phosphorylation cascade. It was initially considered to be a protein kinase acting in the Ras pathway. KSR1 is required for maximal ERK activation induced by growth factors and by some cytotoxic agents. In resting cells, phosphorylated KSR1 is cytoplasmic and in stimulated cells, dephosphorylated KSR1 is membrane associated.

Additional Information

Gene ID	8844
Other Names	KSR; RSU2; B-KSR1; D11Bhm183e; D11Bhm184e; hb; mKSR1; KSR1_HUMAN; KSR1; 2.7.11.1; KSR1_MOUSE; Protein Hb; kinase suppressor of ras 1; kinase suppressor of ras
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
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Protein Information

Name	KSR1
Synonyms	KSR
Function	Part of a multiprotein signaling complex which promotes phosphorylation of Raf family members and activation of downstream MAP kinases (By similarity). Independently of its kinase activity, acts as MAP2K1/MEK1 and MAP2K2/MEK2-dependent allosteric activator of BRAF; upon binding to MAP2K1/MEK1 or MAP2K2/MEK2, dimerizes with BRAF and promotes BRAF-mediated phosphorylation of MAP2K1/MEK1 and/or MAP2K2/MEK2 (PubMed: 29433126). Promotes activation of MAPK1 and/or MAPK3, both in response to EGF and to cAMP (By similarity). Its kinase activity is unsure (By similarity). Some protein kinase activity has been detected in vitro, however the physiological relevance of this activity is unknown (By similarity).
Cellular Location	Cytoplasm. Membrane; Peripheral membrane protein. Cell membrane {ECO:0000250 UniProtKB:Q61097}; Peripheral membrane protein {ECO:0000250 UniProtKB:Q61097}. Cell projection, ruffle membrane {ECO:0000250 UniProtKB:Q61097}. Endoplasmic reticulum membrane. Note=In unstimulated cells, where the phosphorylated form is bound to a 14-3-3 protein, sequestration in the cytoplasm occurs. Following growth factor treatment, the protein is free for membrane translocation, and it moves from the cytoplasm to the cell periphery.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.