

### Datasheet for ABIN968599

# anti-KSR1 antibody (AA 90-203)





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|        |     |     |     |   |

| Quantity:            | 50 μg  |  |
|----------------------|--|--|
| Target:              | KSR1   |  |
| Binding Specificity: | AA 90-203                                      |  |
| Reactivity:          | Mouse, Rat                                     |  |
| Host:                | Mouse  |  |
| Clonality:           | Monoclonal                                     |  |
| Conjugate:           | This KSR1 antibody is un-conjugated            |  |
| Application:         | Western Blotting (WB), Immunofluorescence (IF) |  |

## **Product Details**

| Immunogen:        | Mouse KSR-1 aa. 90-203   |  |
|-------------------|--|--|
| Clone:            | 15-KSR   |  |
| Isotype:          | lgG1   |  |
| Cross-Reactivity: | Rat (Rattus)   |  |
| Characteristics:  | <ol> <li>Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li> <li>Please refer to us for technical protocols.</li> <li>Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.</li> <li>Source of all serum proteins is from USDA inspected abattoirs located in the United States.</li> </ol> |  |
| Purification:     | The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity  |  |

chromatography.

# **Target Details**

| Target:           | KSR1   |
|-------------------|--|
| Alternative Name: | KSR-1 (KSR1 Products)  |
| Background:       | Proteins of the Ras superfamily play critical roles in the control of normal and neoplastic proliferation. In mammalian cells there are four true Ras proteins (encoded by Ha-ras, N-ras, KirasA, and Ki-rasB). These proteins relay signals from tyrosine kinases at the plasma membrane to the nucleus via a network of Ser/Thr kinases that includes the MAP kinase (Raf-MEK-ERK) pathway. Kinase suppressor of Ras (KSR-1) was discovered in a genetic screen to identify mutations that suppress constitutively active Ras mutants. KSR-1 contains five domains that are conserved areas (CA) in Drosophila, mouse, and human. CA1 is a unique domain, CA2 is a proline-rich domain, CA3 is a cysteine-rich domain, CA4 is a Ser/Thr rich region, and CA5 contains a C-terminal kinase domain similar to that of Raf. In COS7 cells, ceramide induces the autophosphorylation of KSR-1 and KSR-1-induced phosphorylation and activation of Raf. In addition, overexpression of KSR-1 in 293T cells leads to recruitment of MEK to a 700 kDa protein complex and translocates MEK from the soluble to the membrane-associated fraction. Thus, KSR-1 may have important kinase and scaffolding activities during Ras-related signaling. |
|                   | This antibody is routinely tested by western blot analysis.  |

Molecular Weight:

Comment:

Restrictions:

115 kDa

Related Products: ABIN967389

For Research Use only

# **Application Details**

| Handling           |   |
|--------------------|---|
| Format:            | Liquid  |
| Concentration:     | 250 μg/mL   |
| Buffer:            | Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide. |
| Preservative:      | Sodium azide  |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which |
|                    | should be handled by trained staff only.                                      |

#### Handling

| Storage:          | -20 °C  |
|-------------------|---|
| Storage Comment:  | Store undiluted at -20° C.  |
| Publications      |   |
| Droduct cited in: | Stawart Sundaram Thong Lee Han Cuan; "Kinese suppressor of Dec forms a multipratoin |

#### Product cited in:

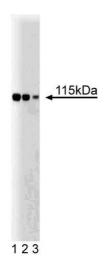
Stewart, Sundaram, Zhang, Lee, Han, Guan: "Kinase suppressor of Ras forms a multiprotein signaling complex and modulates MEK localization." in: **Molecular and cellular biology**, Vol. 19, Issue 8, pp. 5523-34, (1999) (PubMed).

Michaud, Therrien, Cacace, Edsall, Spiegel, Rubin, Morrison: "KSR stimulates Raf-1 activity in a kinase-independent manner." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 94, Issue 24, pp. 12792-6, (1998) (PubMed).

Zhang, Yao, Delikat, Bayoumy, Lin, Basu, McGinley, Chan-Hui, Lichenstein, Kolesnick: "Kinase suppressor of Ras is ceramide-activated protein kinase." in: **Cell**, Vol. 89, Issue 1, pp. 63-72, (1997) (PubMed).

Therrien, Chang, Solomon, Karim, Wassarman, Rubin: "KSR, a novel protein kinase required for RAS signal transduction." in: **Cell**, Vol. 83, Issue 6, pp. 879-88, (1996) (PubMed).

### **Images**



### **Western Blotting**

**Image 1.** Western blot analysis of KSR-1 on a RSV-3T3 lysate. Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the anti- KSR-1 antibody.