# JRAB (E-12): sc-162967



The Power to Overtin

## **BACKGROUND**

JRAB (junctional Rab13-binding protein, MICAL-like protein 2) is a 904 amino acid protein with one CH (calponin-homology) domain and one LIM zinc-binding domain. JRAB has been shown to interact with Rab13 and Rab8 to facilitate cellular transport of claudin-1, occludin and E-cadherin. This interaction is vital for the coordination of the assembly of tight junctions (TJs) and adherens junctions (AJs). Dynamic turnover (endocytic recycling) of cell-to-cell AJs and TJs is essential for epithelial morphogenesis during normal development and differentiation. The endocytic recycling of occludin and cluadin proteins is part of an ongoing process of restructuring and maintaining cell junctions, especially at TJs. JRAb and Rab13 have also been implicated in the carcinoma metastasis event of epithelial cell scattering. This event shows Rab13 and JRAB colocalizing with F-actin in lamellipodial structures prior to cell scattering.

## **REFERENCES**

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- 6. Kanda, I., Nishimura, N., Nakatsuji, H., Yamamura, R., Nakanishi, H. and Sasaki, T. 2008. Involvement of Rab13 and JRAB/MICAL-L2 in epithelial cell scattering. Oncogene 27: 1687-1695.
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## **CHROMOSOMAL LOCATION**

Genetic locus: MICALL2 (human) mapping to 7p22.3; Micall2 (mouse) mapping to 5 G2.

#### SOURCE

JRAB (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JRAB of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162967 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

JRAB (E-12) is recommended for detection of JRAB of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JRAB (E-12) is also recommended for detection of JRAB in additional species, including canine and porcine.

Suitable for use as control antibody for JRAB siRNA (h): sc-89784, JRAB siRNA (m): sc-146332, JRAB shRNA Plasmid (h): sc-89784-SH, JRAB shRNA Plasmid (m): sc-146332-SH, JRAB shRNA (h) Lentiviral Particles: sc-89784-V and JRAB shRNA (m) Lentiviral Particles: sc-146332-V.

Molecular Weight of JRAB: 100 kDa.

Positive Controls: WI-38 whole cell lysate: sc-364260.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try JRAB (F-5): sc-376675 or JRAB (G-10): sc-376791, our highly recommended monoclonal alternatives to JRAB (E-12).

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