

DIRAS3 Antibody

Catalog # ASC11908

Specification

DIRAS3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, E <u>O95661</u> <u>NP_004666</u>, <u>4757772</u> Human Rabbit Polyclonal IgG Predicted: 25 kDa

Application Notes

Observed: 24 kDa KDa DIRAS3 antibody can be used for detection of DIRAS3 by Western blot at 1 - 2 μg/ml.

DIRAS3 Antibody - Additional Information

Gene ID Target/Specificity DIRAS3; DIRAS3 antibody is human specific.

Reconstitution & Storage DIRAS3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions DIRAS3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

9077

DIRAS3 Antibody - Protein Information

Name DIRAS3

Synonyms ARHI, NOEY2, RHOI

Cellular Location Cell membrane; Lipid-anchor; Cytoplasmic side

Tissue Location Expressed in normal ovarian and breast epithelial cells but not in ovarian and breast cancers

DIRAS3 Antibody - Protocols

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



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

DIRAS3 Antibody - Images



Western blot analysis of DIRAS3 in human testis tissue lysate with DIRAS3 antibody at 1 μ g/ml.

DIRAS3 Antibody - Background

DIRAS3 is a member of the ras superfamily, and is expressed in normal ovarian and breast epithelial cells, but not in ovarian and breast cancers. It is an imprinted gene, with mono-allelic expression of the paternal allele, which is associated with growth suppression and down-regulation of cyclin D1 promoter activity and induction of p21 (WAF/CIP1). Thus, this gene appears to be a putative tumor suppressor gene whose function is abrogated in ovarian and breast cancers (1). DIRAS3 has been shown to induce autophagy in human ovarian cancer cells by blocking PI3K signaling, inhibiting the mammalian target of rapamycin (TOR), upregulating ATG4, and colocalizing with LC3 in autophagosomes (2). DIRAS also interacts with C-RAF and downregulates mitogen-activated protein kinase kinases (MEK) to restrict cell migration (3).

DIRAS3 Antibody - References

Yu Y, Xu F, Peng H, et al. NOEY2 (ARHI), an imprinted putative tumor suppressor gene in ovarian and breast carcinomas. Proc. Natl. Acad. Sci. USA 1999; 96:214-9. Lu Z, Luo RZ, Lu Y, et al. The tumor suppressor gene ARHI regulates autophagy and tumor dormancy in human ovarian cancer cells. J. Clin. Invest. 2008; 118:3917-29. Klingauf M, Beck M, Berge U, et al. The tumour suppressor DiRas3 interacts with C-RAF and downregulates MEK activity to restrict cell migration. Biol. Cell 2013; 105:91-107.