

# **DIRAS3 Antibody**

Catalog # ASC11908

## **Specification**

# **DIRAS3 Antibody - Product Information**

Application WB
Primary Accession O95661

Other Accession NP 004666, 4757772

Reactivity
Host
Clonality
Polyclonal

lsotype IgG

Calculated MW Predicted: 25 kDa

Observed: 24 kDa KDa

Application Notes DIRAS3 antibody can be used for detection

of DIRAS3 by Western blot at 1 - 2  $\mu g/ml$ .

## **DIRAS3 Antibody - Additional Information**

Gene ID **9077** 

**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.

# **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

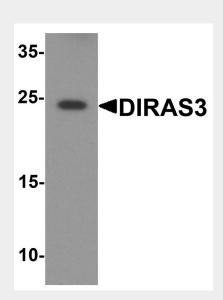
# **DIRAS3 Antibody - Protocols**

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



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

### **DIRAS3 Antibody - Images**



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