

# Anti-DIA-2 (RABBIT) Antibody

DIA-2 Antibody Catalog # ASR5293

### **Specification**

Application

**Physical State** 

Buffer

# Anti-DIA-2 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate
Target Species
Reactivity
Clonality

Unconjugated
Human
Human
Polyclonal

Application Note This affinity purified antibody has been

tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 125 kDa in size corresponding to DIA-2 by western blotting in the appropriate cell lysate or extract. Alternate splice variants have been described for this protein. This antibody will only react with DIA-156

(isoform 1 of DIA-2). Liquid (sterile filtered)

WB, E, IP, I, LCI

0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen This affinity purified antibody was

prepared from whole rabbit serum

produced by repeated immunizations with a synthetic peptide corresponding to amino acid residues at the C-Terminus of

Human DIA-2.

Preservative 0.01% (w/v) Sodium Azide

### Anti-DIA-2 (RABBIT) Antibody - Additional Information

**Gene ID 1730** 

Other Names 1730

### **Purity**

This affinity purified antibody is directed against human DIA-2. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human based on 100% homology for the immunogen sequence. However, cross reactivity is expected with mouse DIA-2 based on a 93% homology to the immunogen sequence. Cross reactivity with DIA-2 homologues from other sources has not been determined.

**Storage Condition** 



Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

# Anti-DIA-2 (RABBIT) Antibody - Protein Information

Name DIAPH2

Synonyms DIA

### **Function**

Could be involved in oogenesis. Involved in the regulation of endosome dynamics. Implicated in a novel signal transduction pathway, in which isoform 3 and CSK are sequentially activated by RHOD to regulate the motility of early endosomes through interactions with the actin cytoskeleton.

#### **Cellular Location**

[Isoform 3]: Cytoplasm, cytosol. Early endosome. Note=Isoform 3 is cytosolic but when coexpressed with RHOD, the 2 proteins colocalize to early endosomes

#### **Tissue Location**

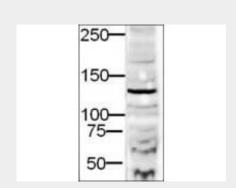
Expressed in testis, ovary, small intestine, prostate, lung, liver, kidney and leukocytes

### Anti-DIA-2 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-DIA-2 (RABBIT) Antibody - Images



Western blot using Rockland's Affinity Purified anti-DIA-2 antibody shows detection of a 132-kDa





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band corresponding to DIA-2 in a lysate prepared from human derived HEK293 cells. Approximately 20 ug of lysate was run on a SDS-PAGE and transferred onto nitrocellulose followed by reaction with a 1:500 dilution of anti-DIA-2 antibody. Detection occurred using a 1:5,000 dilution of HRP-labeled Goat anti-Rabbit IgG for 1 hour at room temperature. A chemiluminescence system was used for signal detection (Roche) using a 1 min exposure time.

## Anti-DIA-2 (RABBIT) Antibody - Background

DIA-2 (also called DIA drome, Dia2, DIAPH2, Diaphanous 2, Diaphanous related formin 2, Diaphorase 2, DRF2, POF and POF2) may play a role in the development and normal function of the ovaries. Mutations of this gene have been linked to premature ovarian failure. Alternative splicing results in two protein isoforms. Furthermore, each splice variant undergoes additional splicing in the 3' UTR. Overall 4 splice variants have been described. DIA-2 is expressed in testis, ovary, small intestine, prostate, lung, liver, kidney and leukocytes and can be found from E16 in ovary and testis and during P6-P16 during differentiation of ovarian follicles. Isoform 1 is referred to as DIA-156, whereas isoform 2 is called DIA-12C.