

**Anti-DIA-2 (RABBIT) Antibody**  
**DIA-2 Antibody**  
**Catalog # ASR5293****Specification**

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

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, E, IP, I, LCI
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).
Physical State	Liquid (sterile filtered)
Buffer	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

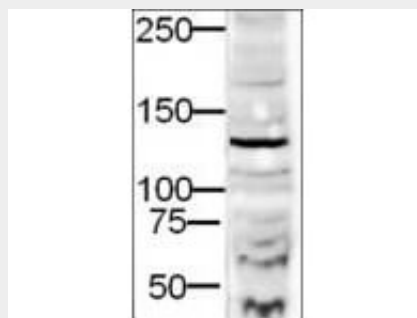
Expressed in testis, ovary, small intestine, prostate, lung, liver, kidney and leukocytes

### 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 Cytometry](#)
- [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

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.