

**CARKD Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP59245****Specification****CARKD Polyclonal Antibody - Product Information**

|                                |                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Application                    | WB, IHC-P, IHC-F, IF, E                                                                                                   |
| Primary Accession              | <a href="#">Q8IW45</a>                                                                                                    |
| Reactivity                     | Rat                                                                                                                       |
| Host                           | Rabbit                                                                                                                    |
| Clonality                      | Polyclonal                                                                                                                |
| Calculated MW                  | 37 KDa                                                                                                                    |
| Physical State                 | Liquid                                                                                                                    |
| Immunogen                      | KLH conjugated synthetic peptide derived from human CARKD                                                                 |
| Epitope Specificity            | 251-347/347                                                                                                               |
| Isotype                        | IgG                                                                                                                       |
| <b>Purity</b>                  |                                                                                                                           |
| affinity purified by Protein A |                                                                                                                           |
| Buffer                         | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                         |
| SUBCELLULAR LOCATION           | Mitochondrion (By similarity).                                                                                            |
| SIMILARITY                     | Belongs to the nnrD/CARKD family.                                                                                         |
| Important Note                 | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |

**Background Descriptions**

CARKD is a 347 amino acid protein that belongs to the YjeF family and exists as three alternatively spliced isoforms. Containing one YjeF C-terminal domain, CARKD is encoded by a gene that maps to human chromosome 13q34. Chromosome 13 contains around 114 million base pairs and 400 genes. Key tumor suppressor genes on chromosome 13 include the breast cancer susceptibility gene, BRCA2, and the RB1 (retinoblastoma) gene. RB1 encodes a crucial tumor suppressor protein which, when defective, leads to malignant growth in the retina and has been implicated in a variety of other cancers. The gene SLITRK1, which is associated with Tourette syndrome, is on chromosome 13. As with most chromosomes, polysomy of part or all of chromosome 13 is deleterious to development and decreases the odds of survival. Trisomy 13, also known as Patau syndrome, is quite deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

**CARKD Polyclonal Antibody - Additional Information****Gene ID** 55739**Other Names**

ATP-dependent (S)-NAD(P)H-hydrate dehydratase {ECO:0000255|HAMAP-Rule:MF\_03157}, 4.2.1.93 {ECO:0000255|HAMAP-Rule:MF\_03157, ECO:0000269|PubMed:30576410}, ATP-dependent NAD(P)HX dehydratase {ECO:0000255|HAMAP-Rule:MF\_03157}, Carbohydrate kinase domain-containing protein {ECO:0000255|HAMAP-Rule:MF\_03157}, NAD(P)HX dehydratase

{ECO:0000312|HGNC:HGNC:25576}, NAXD (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=25576" target="\_blank">HGNC:25576</a>)

**Dilution**

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_E">E~~N/A</span>

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**CARKD Polyclonal Antibody - Protein Information**

**Name** NAXD ([HGNC:25576](#))

**Function**

Catalyzes the dehydration of the S-form of NAD(P)HX at the expense of ATP, which is converted to ADP. Together with NAD(P)HX epimerase, which catalyzes the epimerization of the S- and R-forms, the enzyme allows the repair of both epimers of NAD(P)HX, a damaged form of NAD(P)H that is a result of enzymatic or heat-dependent hydration.

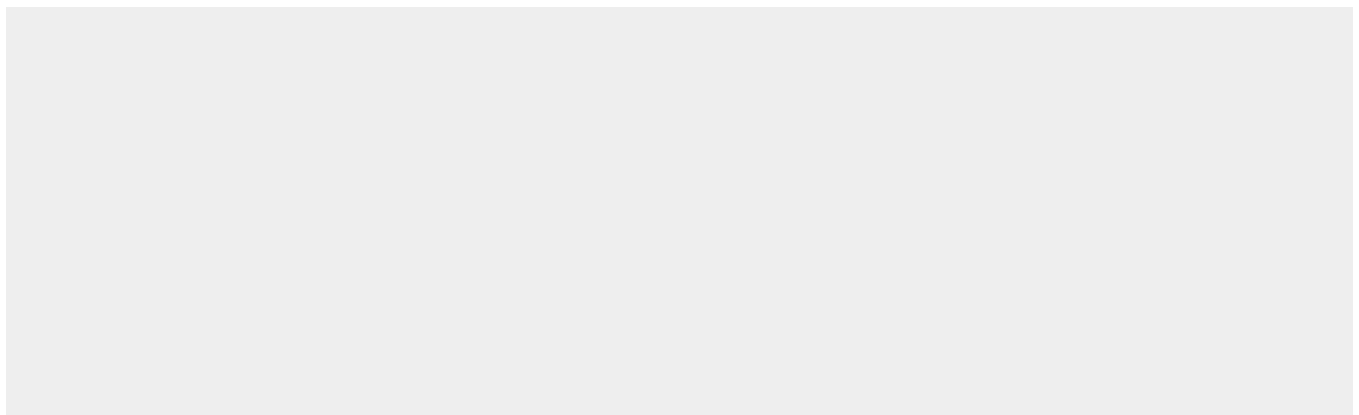
**Cellular Location**

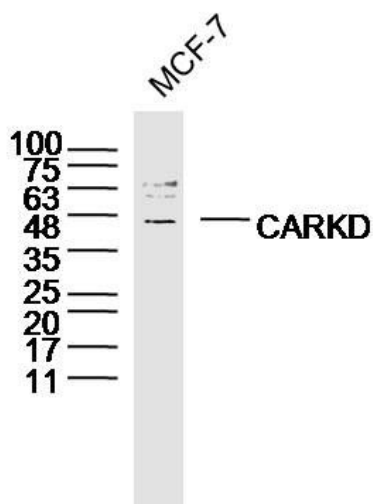
Mitochondrion {ECO:0000255|HAMAP-Rule:MF\_03157}.

**CARKD Polyclonal 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](#)

**CARKD Polyclonal Antibody - Images**



Sample: MCF-7 Cell(Human)Lysate at 30 ug  
Primary: Anti-CARKD (bs-9402R)at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 37kD  
Observed band size: 45kD