

# Choline kinase alpha (CHK) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8179b

## **Product Information**

| Application<br>Primary Accession | WB, E<br><u>P35790</u> |
|----------------------------------|------------------------|
| Other Accession                  | <u>NP_001268</u>       |
| Reactivity                       | Human                  |
| Host                             | Rabbit                 |
| Clonality                        | Polyclonal             |
| Isotype                          | Rabbit IgG             |
| Clone Names                      | RB5497                 |
| Calculated MW                    | 52249                  |
| Antigen Region                   | 427-457                |

### **Additional Information**

| Gene ID            | 1119   |
|--------------------|--|
| Other Names        | Choline kinase alpha, CK, CHETK-alpha, Ethanolamine kinase, EK, CHKA, CHK,<br>CKI  |
| Target/Specificity | This Choline kinase alpha (CHK) antibody is generated from rabbits<br>immunized with a KLH conjugated synthetic peptide between 427-457 amino<br>acids from the C-terminal region of human Choline kinase alpha (CHK). |
| Dilution           | WB~~1:1000 E~~Use at an assay dependent concentration.   |
| Format             | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.<br>This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation<br>followed by dialysis against PBS.                        |
| Storage            | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.  |
| Precautions        | Choline kinase alpha (CHK) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.   |

#### **Protein Information**

| Name     | СНКА  |
|----------|---|
| Synonyms | CHK, CKI {ECO:0000303 PubMed:1618328}                           |
| Function | Plays a key role in phospholipid biosynthesis by catalyzing the |

phosphorylation of free choline to phosphocholine, the first step in phosphatidylcholine biosynthesis (PubMed:<u>17007874</u>, PubMed:<u>19915674</u>, PubMed:<u>23416529</u>, PubMed:<u>34077757</u>). Also phosphorylates ethanolamine, thereby contributing to phosphatidylethanolamine biosynthesis (PubMed:<u>17007874</u>, PubMed:<u>19915674</u>). Has higher activity with choline (PubMed:<u>17007874</u>, PubMed:<u>19915674</u>). May contribute to tumor cell growth (PubMed:<u>19915674</u>).

**Cellular Location** 

Cytoplasm, cytosol.

# Background

The major pathway for the biosynthesis of phosphatidylcholine occurs via the CDP-choline pathway. Choline kinase alpha is the initial enzyme in the sequence and may play a regulatory role. This protein also catalyzes the phosphorylation of ethanolamine. The antibody for this protein recognizes both isoforms.

#### Images



Western blot analysis of anti-CHK (Cat. #AP8179b) in HepG2 cell line lysate (35ug/lane).CHK(arrow) was detected using the purified Pab.

## Citations

• CHKA mediates the poor prognosis of lung adenocarcinoma and acts as a prognostic indicator.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.