

#### **UCK Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8129B

### **Specification**

### **UCK Antibody (C-term) - Product Information**

Application IHC-P, WB,E Primary Accession P30085

Other Accession **029561**, **02KIW9** Reactivity Human, Mouse Predicted Bovine, Pig Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 22222 Antigen Region 132-162

## **UCK Antibody (C-term) - Additional Information**

### **Gene ID 51727**

#### **Other Names**

 $\label{lem:ump-cmp} $$ UMP-CMP kinase {ECO:0000255|HAMAP-Rule:MF_03172}, Deoxycytidylate kinase {ECO:0000255|HAMAP-Rule:MF_03172}, CK {ECO:0000255|HAMAP-Rule:MF_03172}, dCMP kinase {ECO:0000255|HAMAP-Rule:MF_03172}, Nucleoside-diphosphate kinase {ECO:0000255|HAMAP-Rule:MF_03172}, 2746 {ECO:0000255|HAMAP-Rule:MF_03172}, Uridine monophosphate/cytidine monophosphate kinase {ECO:0000255|HAMAP-Rule:MF_03172}, UMP/CMP kinase {ECO:0000255|HAMAP-Rule:MF_03172}, UMP/CMPK {ECO:0000255|HAMAP-Rule:MF_03172}, CMPK1 {ECO:0000255|HAMAP-Rule:MF_03172} \\$ 

## **Target/Specificity**

This UCK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 132-162 amino acids from the C-terminal region of human UCK.

#### **Dilution**

IHC-P~~1:50~100 WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### **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**

UCK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic



procedures.

# **UCK Antibody (C-term) - Protein Information**

Name CMPK1 {ECO:0000255|HAMAP-Rule:MF 03172}

**Function** Catalyzes the phosphorylation of pyrimidine nucleoside monophosphates at the expense of ATP. Plays an important role in de novo pyrimidine nucleotide biosynthesis. Has preference for UMP and CMP as phosphate acceptors. Also displays broad nucleoside diphosphate kinase activity.

#### **Cellular Location**

Nucleus {ECO:0000255|HAMAP-Rule:MF\_03172, ECO:0000269|PubMed:10462544, ECO:0000269|PubMed:11912132}. Cytoplasm {ECO:0000255|HAMAP-Rule:MF\_03172, ECO:0000269|PubMed:10462544, ECO:0000269|PubMed:11912132}. Note=Predominantly cytoplasmic, less than 15% nuclear.

#### **Tissue Location**

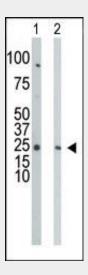
Ubiquitously expressed.

# **UCK Antibody (C-term) - Protocols**

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

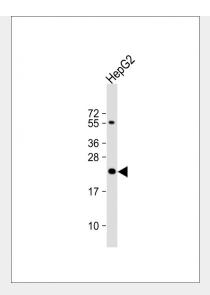
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **UCK Antibody (C-term) - Images**

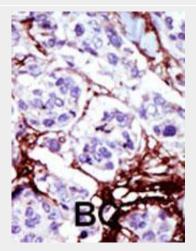


The anti-UCK Pab (Cat. #AP8129b) is used in Western blot to detect UCK in HepG2 cell lysate (Lane 1) and mouse cerebellum tissue lysate (Lane 2).





Anti-UCK Antibody (L148) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

### UCK Antibody (C-term) - Background

UCK1 (Uridine-cytidine kinase 1) phosphorylates uridine and cytidine to uridine monophosphate and cytidine monophosphate. This enzyme does not phosphorylate deoxyribonucleosides or purine ribonucleosides. Of note, UCK1 is able to use either ATP or GTP as a phosphate donor. UCK1 also possesses the ability to phosphorylate a number of cytidine and uridine nucleoside analogs such as 6-azauridine, 5-fluorouridine, 4-thiouridine, 5-bromouridine, N(4)-acetylcytidine, N(4)-anisoylcytidine. N(4)-benzoylcytidine, 5-fluorocytidine, 2-thiocytidine, 5-methylcytidine, and N(4)-anisoylcytidine.

### **UCK Antibody (C-term) - References**

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Hu, R.M., et al., Proc. Natl. Acad. Sci. U.S.A. 97(17):9543-9548 (2000). Hughes, G.J., et al., Electrophoresis 14(11):1216-1222 (1993). Hochstrasser, D.F., et al., Electrophoresis 13(12):992-1001 (1992).