

## **RHCG Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19157c

## Specification

# **RHCG Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q9UBD6</u> <u>NP\_057405.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 53179 184-213

## **RHCG Antibody (Center) - Additional Information**

## Gene ID 51458

#### **Other Names**

Ammonium transporter Rh type C, Rh glycoprotein kidney, Rhesus blood group family type C glycoprotein, Rh family type C glycoprotein, Rh type C glycoprotein, Tumor-related protein DRC2, RHCG, C15orf6, CDRC2, PDRC2, RHGK

#### Target/Specificity

This RHCG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 184-213 amino acids from the Central region of human RHCG.

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. 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

RHCG Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **RHCG Antibody (Center) - Protein Information**

## Name RHCG



Synonyms C15orf6, CDRC2, PDRC2, RHGK

**Function** Ammonium transporter involved in the maintenance of acid-base homeostasis. Transports ammonium and its related derivative methylammonium across the plasma membrane of epithelial cells likely contributing to renal transepithelial ammonia transport and ammonia metabolism. Postulated to primarily mediate an electroneutral bidirectional transport of NH3 ammonia species according to a mechanism that implies interaction of an NH4(+) ion with acidic residues of the pore entry followed by dissociation of NH4(+) into NH3 and H(+). As a result NH3 transits through the central pore and is protonated on the extracellular side reforming NH4(+) (PubMed:<u>11062476</u>, PubMed:<u>14761968</u>, PubMed:<u>15929723</u>, PubMed:<u>16477434</u>, PubMed:<u>16580862</u>, PubMed:<u>24077989</u>). May act as a CO2 channel providing for renal acid secretion (PubMed:<u>24077989</u>).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Also detected at the basolateral membrane and in subapical vesicles.

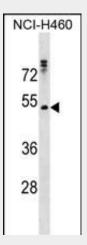
### **Tissue Location**

Expressed in brain, testis, placenta, pancreas, esophagus and prostate. Expressed in squamous epithelial tissues (at protein level). Expressed in kidney.

# **RHCG Antibody (Center) - Protocols**

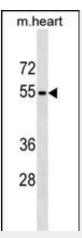
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **RHCG Antibody (Center) Images**



RHCG Antibody (Center) (Cat. #AP19157c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the RHCG antibody detected the RHCG protein (arrow).





RHCG Antibody (Center) (Cat. #AP19157c) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the RHCG antibody detected the RHCG protein (arrow).

# RHCG Antibody (Center) - Background

RHCG functions as an electroneutral and bidirectional ammonium transporter. May regulate transepithelial ammonia secretion.

# **RHCG Antibody (Center) - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Gruswitz, F., et al. Proc. Natl. Acad. Sci. U.S.A. 107(21):9638-9643(2010) Mouro-Chanteloup, I., et al. PLoS ONE 5 (1), E8921 (2010) : Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Han, K.H., et al. Am. J. Physiol. Lung Cell Mol. Physiol. 297 (1), L153-L163 (2009) :