

## CMG1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58581

## **Product Information**

**Application** IHC-P, IHC-F, IF, E

Primary Accession Q96LB3

**Reactivity** Rat, Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 69239
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human CMG1

Epitope Specificity 51-150/600

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Cytoplasmic vesicle. Note=Intracellular vesicular compartment.

**Post-translational** Phosphorylated upon DNA damage, probably by ATM or ATR (By similarity). **modifications** 

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** No data available.

## **Additional Information**

**Gene ID** 80173

Other Names Intraflagellar transport protein 74 homolog, Capillary morphogenesis gene 1

protein, CMG-1, Coiled-coil domain-containing protein 2, IFT74, CCDC2, CMG1

**Target/Specificity** Highly expressed in adult and fetal kidney and expressed at lower level in

adult heart, placenta, lung, liver and pancreas, and in fetal heart, lung and liver. Little to no expression was detected in adult brain and skeletal muscle

or in fetal brain, thymus and spleen.

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**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.

## **Protein Information**

Name IFT74

Synonyms CCDC2, CMG1

**Function** Component of the intraflagellar transport (IFT) complex B: together with

IFT81, forms a tubulin-binding module that specifically mediates transport of tubulin within the cilium (PubMed: <u>23990561</u>). Binds beta-tubulin via its basic region (PubMed: <u>23990561</u>). Required for ciliogenesis (PubMed: <u>23990561</u>). Essential for flagellogenesis during spermatogenesis (PubMed: <u>33689014</u>).

**Cellular Location** Cell projection, cilium. Cytoplasmic vesicle. Cell projection, cilium, flagellum.

Cytoplasmic vesicle, secretory vesicle, acrosome

{ECO:0000250|UniProtKB:Q8BKE9}. Note=Localizes along primary cilia at interphase and around the basal body/centriole at interphase and mitosis (PubMed:15024030). In male germ cells, strongly expressed in the vesicles of

spermatocytes and round spermatids and also in the acrosome and

centrosome regions of elongating spermatids and in developing sperm tails

(By similarity). {ECO:0000250 | UniProtKB:Q8BKE9,

ECO:0000269 | PubMed:15024030}

**Tissue Location** Highly expressed in adult and fetal kidney and expressed at lower level in

adult heart, placenta, lung, liver and pancreas, and in fetal heart, lung and liver. Little to no expression was detected in adult brain and skeletal muscle or in fetal brain, thymus and spleen (PubMed:11683410). Detected in sperm

(at protein level) (PubMed:33689014).

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