

# Goat Anti-CMG1 / CCDC2 / IFT74 Antibody

Peptide-affinity purified goat antibody Catalog # AF4329a

#### **Product Information**

Application IF, FC, E Primary Accession Q96LB3

Other Accession NP 001092692.1, NP 001092693.1, NP 079379.2, AAK77221.1

Reactivity
Predicted
Human
Host
Goat
Clonality
Polyclonal
Isotype
IgG
Calculated MW
Human
Human
Host
Goat
Polyclonal
GG
69239

### **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

**Dilution** IF~~1:50~200 FC~~1:10~50 E~~1:32000

**Format** 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum

albumin.

**Immunogen** Peptide with sequence CKTIVDALHSTSGN, from the C or N Terminus of the

protein sequence according to NP\_001092692.1; NP\_001092693.1;

NP\_079379.2; AAK77221.1.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Goat Anti-CMG1 / CCDC2 / IFT74 Antibody is for research use only and not for

use in diagnostic or therapeutic procedures.

#### **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>).

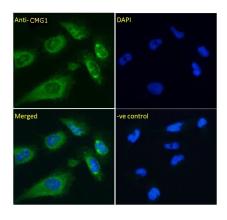
#### **Cellular Location**

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}

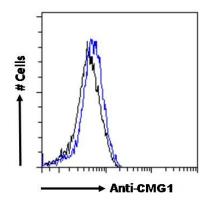
#### **Tissue Location**

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).

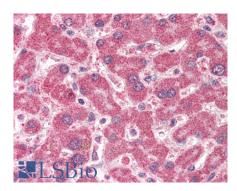
## **Images**



AF4329a Immunofluorescence analysis of paraformaldehyde fixed U251 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (4ug/ml), showing cytoplasmic and Golgi apparatus staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (4ug/ml).



AF4329a Flow cytometric analysis of paraformaldehyde fixed U251 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (0.4ug/ml) showing weak staining. IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.



AF4329a (5 μg/ml) staining of paraffin embedded Human Liver. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

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