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

Additional Information

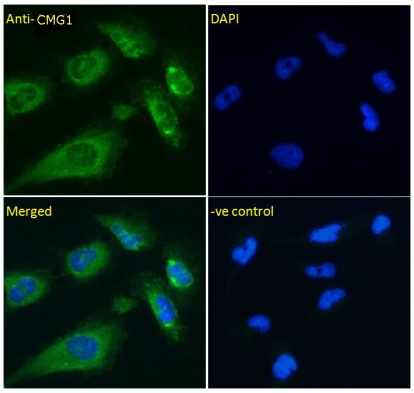
Gene ID	80173
Other Names	Intraflagellar transport protein 74 homolog, Capillary morphogenesis gene 1 protein, CMG-1, Coiled-coil domain-containing protein 2, IFT74, CCDC2, CMG1
Dilution	IF~~1:50~200 FC~~1:10~50 E~~1:32000
Format	0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum 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

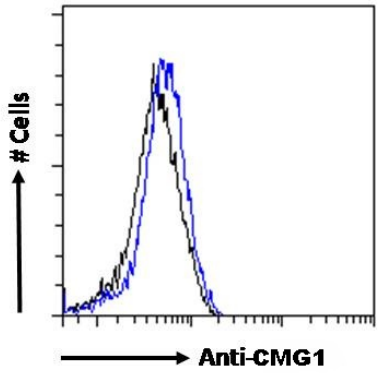
Name	IFT74
Synonyms	CCDC2, CMG1
Function	Component of the intraflagellar transport (IFT) complex B: together with IFT81, forms a tubulin-binding module that specifically mediates transport of

	tubulin within the cilium (PubMed:23990561). Binds beta-tubulin via its basic region (PubMed:23990561). Required for ciliogenesis (PubMed:23990561). Essential for flagellogenesis during spermatogenesis (PubMed:33689014).
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).

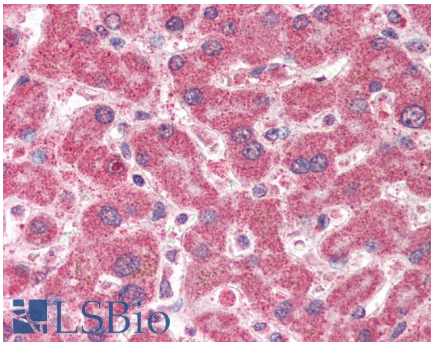
Images



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'.