10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-CMG1 / CCDC2 / IFT74 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1257a

Specification

Goat Anti-CMG1 / CCDC2 / IFT74 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q96LB3
Other Accession	NP_001092692.1, NP_001092693.1, NP_079379.2, AAK77221.1, 80173, 313365 (rat)
Reactivity	**Human, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**69239**

Goat Anti-CMG1 / CCDC2 / IFT74 Antibody - 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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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.

Goat Anti-CMG1 / CCDC2 / IFT74 Antibody - 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).

Goat Anti-CMG1 / CCDC2 / IFT74 Antibody - Protocols

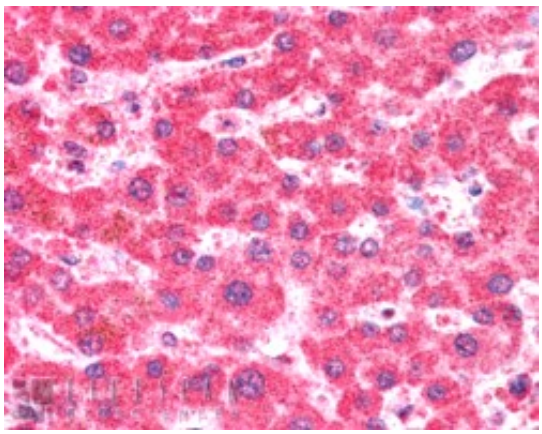
Provided below are standard protocols that you may find useful for product applications.

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

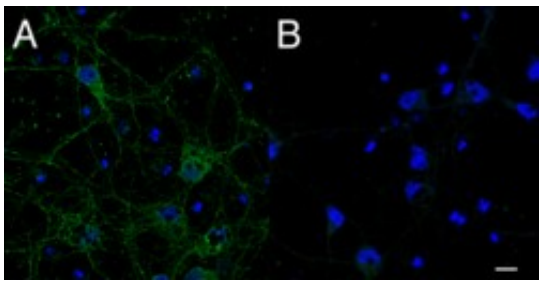


AF1257a (0.2 µg/ml) staining of HEK293 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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AF1257a (5 µg/ml) staining of paraffin embedded Human Liver. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. **This data is from a previous batch, not on sale.**



Goat Anti-CMG1 / CCDC2 / IFT74 Antibody - References

Genetic studies of GRN and IFT74 in amyotrophic lateral sclerosis. Xiao S, et al. Neurobiol Aging, 2008 Aug. PMID 17383054.
Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.
The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.
Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.
Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.