

Rabbit anti-Human CYC1 Polyclonal Antibody | anti-CYC1 antibody

Anti-CYC1 Antibody Picoband

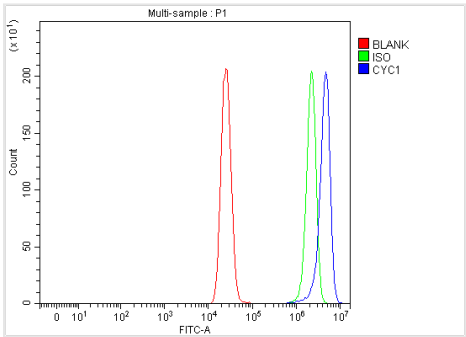
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127152	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

CYC1; Polyclonal Antibody; Anti-CYC1 Antibody Picoband; OFD1 centriole and centriolar satellite protein; Oral-facial-digital syndrome 1 protein; Protein 71-7A; OFD1; CXorf5; anti-CYC1 antibody

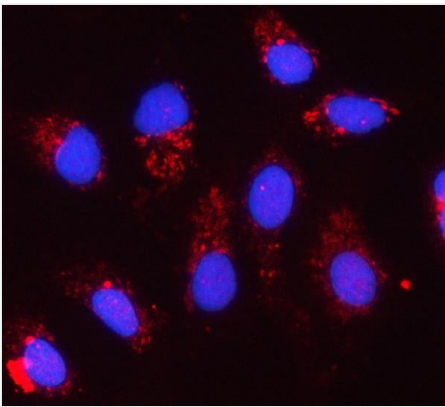
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Widely expressed.Expressed in 9 and 14 weeks old embryos in metanephric mesenchyme, oral mucosa, lung, heart, nasal and cranial cartilage, and brain.Expressed in metanephros, brain, tongue, and limb.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-CYC1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human CYC1 recombinant protein (Position: S85-K325).
Subcellular Localization	Nucleus. Centriole. Cilium basal body. Centriolar satellite.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Component of the centrioles controlling mother and daughter centrioles length. Recruits to the centriole IFT88 and centriole distal appendage-specific proteins including CEP164. Involved in the biogenesis of the cilium, a centriole-associated function. The cilium is a cell surface projection found in many vertebrate cells required to transduce signals important for development and tissue homeostasis. Plays an important role in development by regulating Wnt signaling and the specification of the left-right axis. Only OFD1 localized at the centriolar satellites is removed by autophagy, which is an important step in the ciliogenesis regulation.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



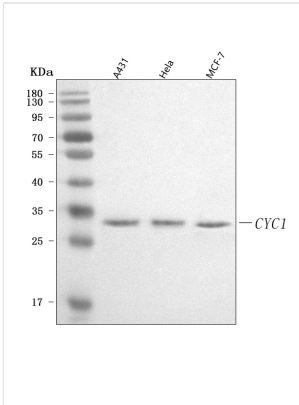
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of MCF-7 cells using anti-CYC1 antibody (AAA127152). Overlay histogram showing MCF-7 cells stained with AAA127152 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CYC1 Antibody (AAA127152, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of CYC1 using anti-CYC1 antibody (AAA127152). CYC1 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-CYC1 Antibody (AAA127152) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of CYC1 using anti-CYC1 antibody (AAA127152). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human A431 whole cell lysates, Lane 2: human HeLa whole cell lysates, Lane 3: human MCF-7 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CYC1 antigen affinity purified polyclonal antibody (#AAA127152) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CYC1 at approximately 35 kDa. The expected band size for CYC1 is at 35 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CYC1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-CYC1 antibody	Primary Antibodies; Signal Transduction

References	1. Duncan, A. M. V., Ozawa, T., Suzuki, H., Rozen, R. Assignment of the gene for the cytochrome c1 subunit of the mitochondrial cytochrome bc-1 complex (CYC1) to human chromosome 8q24.3. Genomics 19: 400-401, 1994.2. Fukuyama, R., Minoshima, S., Nishikimi, M., Ozawa, T., Suzuki, H., Shimizu, N. Assignment of cytochrome c1 gene to chromosome 8q24 distal to MYC. (Abstract) Cytogenet. Cell Genet. 58: 1929 only, 1991.3. Gaignard, P., Menezes, M., Schiff, M., Bayot, A., Rak, M., Ogier de Baulny, H., Su, C.-H., Gilleron, M., Lombes, A., Abida, H., Tzagoloff, A., Riley, L., and 11 others. Mutations in CYC1, encoding cytochrome c1 subunit of respiratory chain complex III, cause insulin-responsive hyperglycemia. Am. J. Hum. Genet. 93: 384-389, 2013.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	21359867
NCBI GeneID	1537
NCBI Accession #	NP_001907.2
NCBI GenBank Nucleotide #	NM_001916.3
UniProt Accession #	P08574; Q5U062; Q6FHS7
Molecular Weight	35,422 Da
NCBI Official Full Name	cytochrome c1, heme protein, mitochondrial
NCBI Official Synonym Full Names	cytochrome c-1
NCBI Official Symbol	CYC1
NCBI Official Synonym Symbols	UQCR4
NCBI Protein Information	cytochrome c1, heme protein, mitochondrial; complex III subunit 4; complex III subunit IV; cytochrome b-c1 complex subunit 4; ubiquinol-cytochrome-c reductase complex cytochrome c1 subunit
UniProt Protein Name	Cytochrome c1, heme protein, mitochondrial
UniProt Gene Name	CYC1
UniProt Synonym Gene Names	Cytochrome c-1
UniProt Entry Name	CY1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.