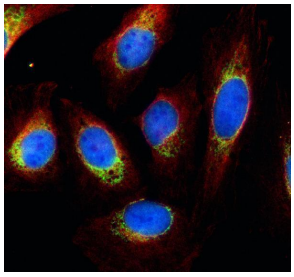
CHCHD6 Antibody / MICOS complex subunit MIC25 Antibody (FY13625)

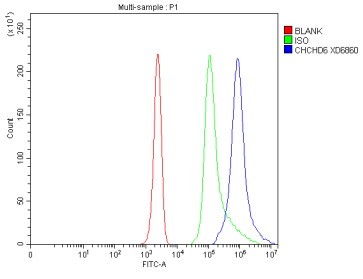
Catalog No.	Formulation	Size
FY13625	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

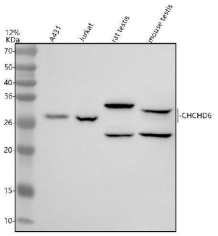
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9BRQ6
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5 ug/ml
Limitations	For research use only, this CHCHD6 Antibody / MICOS complex subunit MIC25 Antibody is not intended for diagnostic or therapeutic use.



CHCHD6 Antibody by IF in U2OS cells. Immunofluorescence analysis using MICOS complex subunit MIC25 Antibody reveals green punctate and perinuclear cytoplasmic staining in U2OS cells, alongside red alpha-tubulin labeling and blue nuclear counterstaining. Cells were incubated with 5 ug/mL primary antibody overnight at 4oC and detected using fluorophore-conjugated secondary antibodies. The pattern is compatible with mitochondrial-associated distribution, but the image does not include a mitochondrial colocalization marker.



CHCHD6 Antibody by FACS in Jurkat cells. Flow cytometry analysis using MICOS complex subunit MIC25 Antibody demonstrates a rightward fluorescence shift in fixed, permeabilized Jurkat cells (blue) compared with the rabbit IgG isotype control (green) and unstained blank (red). Intracellular staining used 1 ug primary antibody per 1 x 10^6 cells for 30 minutes at 20oC, followed by fluorescent secondary antibody. The experiment measures intracellular rather than cell-surface CHCHD6.



CHCHD6 Antibody by WB in human cells and rodent testis. Western blot analysis using MICOS complex subunit MIC25 Antibody detects bands consistent with the expected approximately 26 kDa molecular weight in human A431 (lane 1), Jurkat (lane 2), rat testis (lane 3), and mouse testis (lane 4) lysates. Reduced samples containing 30 ug total protein per lane were resolved by 12% SDS-PAGE and transferred to nitrocellulose. The primary antibody was applied at 0.5 ug/mL overnight at 4oC, followed by HRP-conjugated secondary antibody and chemiluminescent detection. Additional higher bands are visible in the rodent samples but have not been assigned identities.

Description

CHCHD6 Antibody / MICOS complex subunit MIC25 Antibody recognizes CHCHD6, also called MIC25, a protein associated with the mitochondrial contact site and cristae organizing system, or MICOS. Mitochondrial cristae are folds of the inner membrane that create specialized spaces for oxidative phosphorylation and other mitochondrial activities. Their shape is actively maintained rather than simply arising from excess membrane surface. MICOS helps organize crista junctions, the narrow connections between crista membranes and the inner boundary membrane, and thereby supports the architecture required for normal mitochondrial function.

CHCHD6 contains a coiled-coil-helix-coiled-coil-helix domain, a structural feature found in several mitochondrial intermembrane-space proteins. Within the MICOS system, proteins such as MIC60 and MIC10 play central roles in organizing membrane contacts and curvature. MIC25 is related to MIC19, encoded by CHCHD3, and participates in the wider network of protein interactions associated with crista organization. Similarity between these proteins does not mean that their contributions are completely interchangeable; complex composition and partner availability can influence their individual roles.

The CHCHD6 Antibody recognizes MIC25, a component of the protein network that helps organize the architecture of mitochondrial crista junctions. Crista junctions affect more than mitochondrial appearance. Their organization helps define the distribution of respiratory complexes, the connectivity of membrane compartments, and the movement of metabolites within mitochondria. When MICOS integrity is disturbed, cristae can become abnormally arranged, with consequences for mitochondrial bioenergetics and cellular stress responses. The severity of these effects depends on which component is disrupted and how the remaining structural machinery responds.

MICOS also participates in communication between the inner and outer mitochondrial membranes through associations with other protein assemblies. Such connections help coordinate organelle architecture across two distinct membranes. Understanding CHCHD6 requires placing it within this broader structural network rather than assigning it an independent membrane-shaping activity. Defining how MIC25 associates with other MICOS subunits, and how those interactions change during mitochondrial remodeling, remains important for explaining the stability and adaptability of crista junctions.

Explore related research targets in our Cell Biology Antibodies collection.

Application Notes

An appropriate dilution of the CHCHD6 Antibody / MICOS complex subunit MIC25 Antibody should be determined empirically before routine use.

Immunogen

The CHCHD6 Antibody was generated using e. coli-derived human CHCHD6 recombinant protein (amino acids R10-Q226).

Storage

After reconstitution, keep the CHCHD6 Antibody at 4oC for up to one month. Alternatively, store aliquots at -20oC for up to six months. Avoid multiple freezing and thawing cycles.

Alternate Names

CHCHD6 antibody, MICOS complex subunit MIC25 antibody, coiled-coil-helix-coiled-coil-helix domain containing 6 antibody, CHCM1 antibody, Coiled-coil-helix cristae morphology protein 1 antibody, Coiled-coil-helix-coiled-coil-helix domain-containing protein 6 antibody, MIC25 antibody

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