

# CHCHD4 (K-14): sc-102437

## BACKGROUND

CHCHD4 (coiled-coil-helix-coiled-coil-helix domain containing 4), also known as MIA40, is an 142 amino acid protein that contains one CHCH domain and localizes to the mitochondrial intermembrane space. Expressed in a variety of tissues with particularly high expression in kidney and liver, CHCHD4 exists as a homooligomer that is required for the folding of small cysteine-containing proteins. Specifically, CHCHD4 is thought to function via a disulfide relay system that oxidizes precursor proteins, thereby promoting their folding within mitochondria. CHCHD4 is expressed as multiple alternatively spliced isoforms that are encoded by a gene which maps to human chromosome 3. Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CHCHD4 (human) mapping to 3p25.1.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

CHCHD4 (K-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CHCHD4 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102437 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CHCHD4 (K-14) is recommended for detection of CHCHD4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CHCHD family members.

CHCHD4 (K-14) is also recommended for detection of CHCHD4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CHCHD4 siRNA (h): sc-78156, CHCHD4 shRNA Plasmid (h): sc-78156-SH and CHCHD4 shRNA (h) Lentiviral Particles: sc-78156-V.

Molecular Weight of CHCHD4: 22 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CHCHD4 (C-12): sc-365137**, our highly recommended monoclonal alternative to CHCHD4 (K-14).