

# CHCHD4 (H-107): sc-98628

## BACKGROUND

CHCHD4 (coiled-coil-helix-coiled-coil-helix domain containing 4), also known as MIA40, is a 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.

## CHROMOSOMAL LOCATION

Genetic locus: CHCHD4 (human) mapping to 3p25.1; Chchd4 (mouse) mapping to 6 D1.

## SOURCE

CHCHD4 (H-107) is a rabbit polyclonal antibody raised against amino acids 1-107 mapping at the N-terminus of CHCHD4 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## RESEARCH USE

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

## APPLICATIONS

CHCHD4 (H-107) is recommended for detection of CHCHD4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CHCHD4 (H-107) is also recommended for detection of CHCHD4 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for CHCHD4 siRNA (h): sc-78156, CHCHD4 siRNA (m): sc-142316, CHCHD4 shRNA Plasmid (h): sc-78156-SH, CHCHD4 shRNA Plasmid (m): sc-142316-SH, CHCHD4 shRNA (h) Lentiviral Particles: sc-78156-V and CHCHD4 shRNA (m) Lentiviral Particles: sc-142316-V.

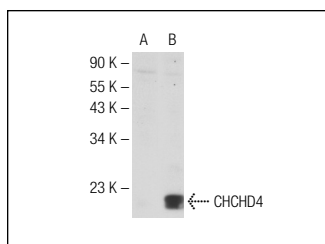
Molecular Weight of CHCHD4: 22 kDa.

Positive Controls: CHCHD4 (m): 293T Lysate: sc-119217.

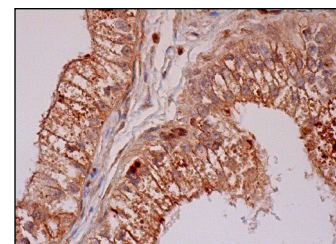
## RECOMMENDED SECONDARY REAGENTS

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



CHCHD4 (H-107): sc-98628. Western blot analysis of CHCHD4 expression in non-transfected: sc-117752 (A) and mouse CHCHD4 transfected: sc-119217 (B) 293T whole cell lysates.



CHCHD4 (H-107): sc-98628. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing cytoplasmic and membrane staining of glandular cells.

## 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 (H-107).