

CHD7 (H-300): sc-98679

BACKGROUND

Chromodomain-helicase-DNA-binding protein 7 (CHD7) is a 2,997 amino acid member of the SNF2/RAD54 helicase family of proteins and contains 2 chromo domains, one helicase ATP-binding domain and one helicase C-terminal domain. Highly expressed in both fetal and adult brain, CHD7 is thought to be a potential transcription regulator. Mutations in the gene encoding CHD7 have been shown to cause CHARGE syndrome, a common cause of congenital anomalies, including choanal atresia and malformations of the heart, inner ear and retina. Defects in the CHD7 gene have also been linked to increased susceptibility to idiopathic scoliosis, the most common spinal deformity in children. Two isoforms of CHD7 exist as a result of alternative splicing events.

REFERENCES

1. Ogata, T., et al. 2006. Kallmann syndrome phenotype in a female patient with CHARGE syndrome and CHD7 mutation. *Endocr. J.* 53: 741-743.
2. Gao, X., et al. 2007. CHD7 gene polymorphisms are associated with susceptibility to idiopathic scoliosis. *Am. J. Hum. Genet.* 80: 957-965.
3. Udaka, T., et al. 2007. An Alu retrotransposition-mediated deletion of CHD7 in a patient with CHARGE syndrome. *Am. J. Med. Genet. A* 143A: 721-726.

CHROMOSOMAL LOCATION

Genetic locus: CHD7 (human) mapping to 8q12.1; Chd7 (mouse) mapping to 4 A1.

SOURCE

CHD7 (H-300) is a rabbit polyclonal antibody raised against amino acids 297-596 mapping within an internal region of CHD7 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.

APPLICATIONS

CHD7 (H-300) is recommended for detection of CHD7 of mouse 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).

Suitable for use as control antibody for CHD7 siRNA (h): sc-72884, CHD7 siRNA (m): sc-72885, CHD7 shRNA Plasmid (h): sc-72884-SH, CHD7 shRNA Plasmid (m): sc-72885-SH, CHD7 shRNA (h) Lentiviral Particles: sc-72884-V and CHD7 shRNA (m) Lentiviral Particles: sc-72885-V.

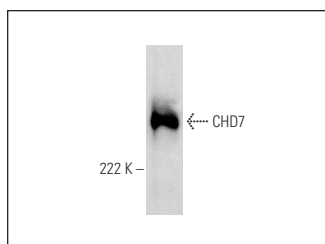
Molecular Weight of CHD7: 336 kDa.

Positive Controls: IMR-32 nuclear extract: sc-2148 or NIH/3T3 whole cell lysate: sc-2210.

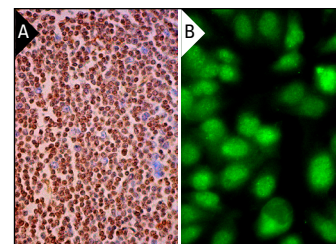
RECOMMENDED SECONDARY REAGENTS

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



CHD7 (H-300): sc-98679. Western blot analysis of CHD7 expression in IMR-32 nuclear extract.



CHD7 (H-300): sc-98679. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing nuclear staining of cells in non-germinal centers (A). Immunofluorescence staining of formalin-fixed HeLa cells showing nuclear localization. Kindly provided by Yang Xiang, Ph.D., Division of Newborn Medicine, Boston Children's Hospital, Cell Biology Department, Harvard Medical School (B).

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **CHD7 (F-11): sc-390742**, our highly recommended monoclonal alternative to CHD7 (H-300).