

CPTC-NCAPH2-1 (CAB079962)

Uniprot ID: [Q6IBW4](#)

Protein name: CNDH2_HUMAN

Full name: Condensin-2 complex subunit H2

Function: Regulatory subunit of the condensin-2 complex, a complex that seems to provide chromosomes with an additional level of organization and rigidity and in establishing mitotic chromosome architecture (PubMed:14532007). May promote the resolution of double-strand DNA catenanes (intertwines) between sister chromatids. Condensin-mediated compaction likely increases tension in catenated sister chromatids, providing directionality for type II topoisomerase-mediated strand exchanges toward chromatid decatenation. Required for decatenation of chromatin bridges at anaphase. Early in neurogenesis, may play an essential role to ensure accurate mitotic chromosome condensation in neuron stem cells, ultimately affecting neuron pool and cortex size (By similarity). Seems to have lineage-specific role in T-cell development (PubMed:14532007).

Subcellular location:

Nucleus (*experimental evidence*)

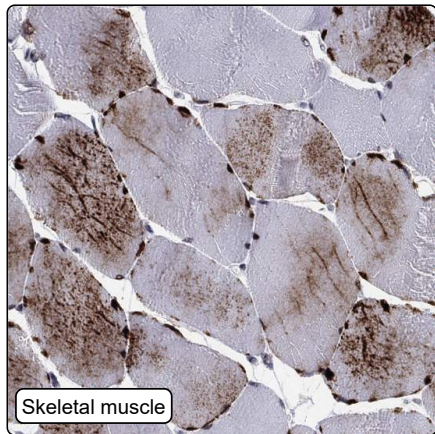
Chromosome (*experimental evidence*)

NOTE: Distributed along the arms of chromosomes assembled in vivo and in vitro.

Protein existence: Experimental evidence at protein level

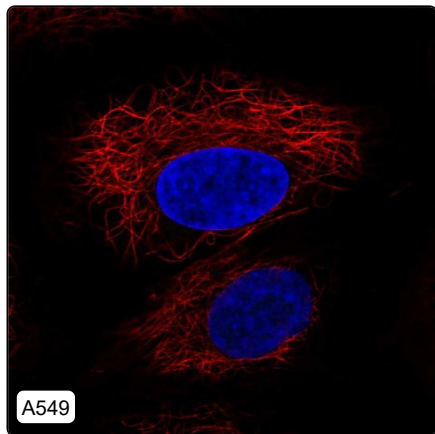
Comment:

Immunohistochemistry



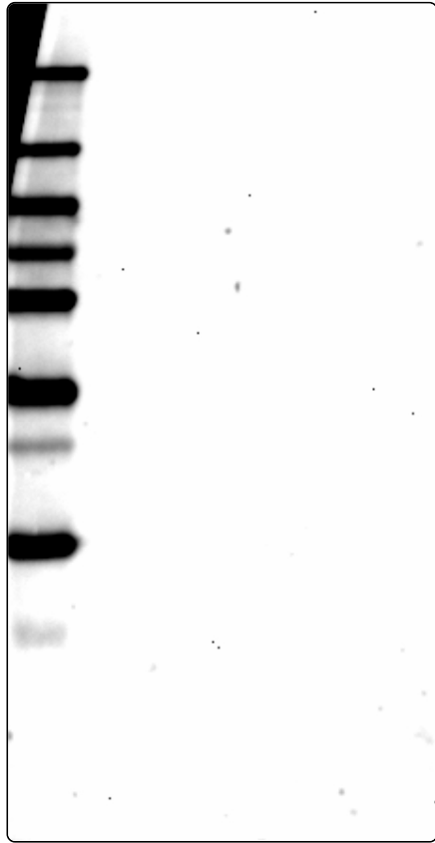
IHC protocol:	HIER pH6, Dilution 1:250
IHC test staining:	Cytoplasmic positivity in skeletal muscle and gastrointestinal tract.
Literature conformance:	Partly consistent with extensive gene/protein characterization data
Literature significance:	
RNA consistency:	Not consistent with RNA expression data
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern
IHC fail comment:	ANTIBODY FAILED: Improbable histological location, Not consistent with RNA

Immunofluorescence



IF Overlay:	antibody (green), anti-tubuline (red) and DAPI (blue)
IF main location:	
IF additional location:	
IF Antibody score:	Failed IF
IF in A549:	Negative
IF in HEK 293:	Negative
IF in U-2 OS:	Negative

Western blot



WB Size markers (kDa):	250, 130, 100, 70, 55, 35, 25, 15, 10
WB Lanes:	Marker (1), RT4 (2), U-251 MG (3), Plasma (4), Liver (5), Tonsil (6)
WB Target weight (kDa):	16, 32, 33, 66, 68, 68
WB Validation:	Uncertain (No bands detected.)