

# CPTC-CASP3-1 (CAB079971)

Uniprot ID: [P42574](#)

Protein name: CASP3\_HUMAN

Full name: Caspase-3

**Tissue specificity:** Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune system.

**Function:** Involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-Gly-217' bond. Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7 and -9. Involved in the cleavage of huntingtin. Triggers cell adhesion in sympathetic neurons through RET cleavage.

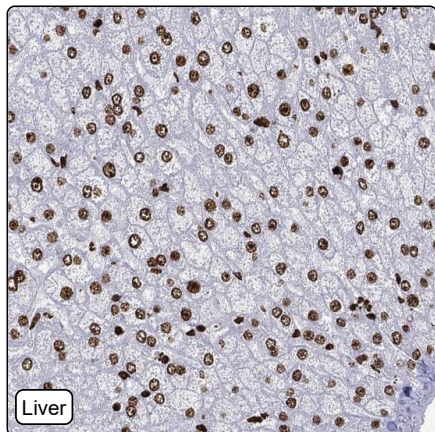
**Subcellular location:**

Cytoplasm

**Protein existence:** Experimental evidence at protein level

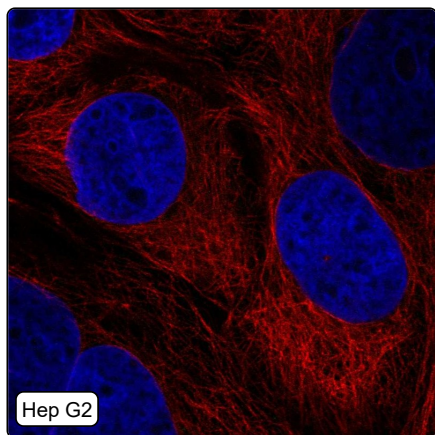
Comment:

## Immunohistochemistry



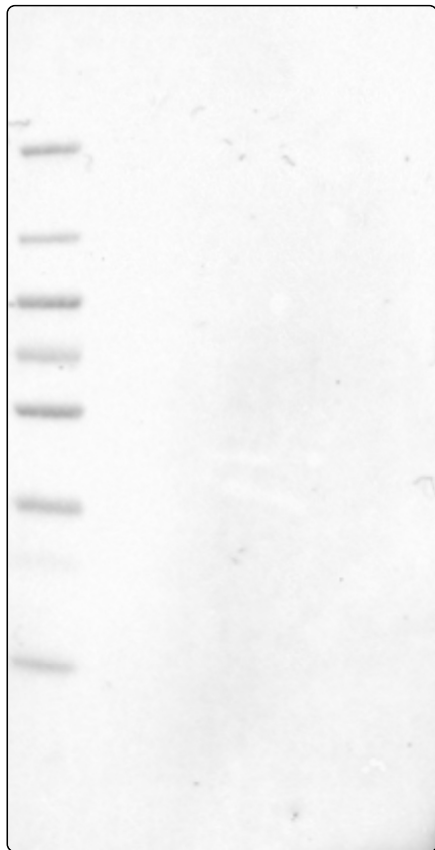
IHC protocol:	HIER pH6, Dilution 1:600
IHC test staining:	Nuclear positivity in most tissues.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	Limited
RNA consistency:	Mainly consistent with RNA expression data
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern
IHC fail comment:	ANTIBODY FAILED: Improbable subcellular location, Dissimilar sibling

## Immunofluorescence



IF Overlay:	antibody (green), anti-tubuline (red) and DAPI (blue)
IF main location:	
IF additional location:	
IF Antibody score:	Failed IF
IF in HEK 293:	Negative
IF in Hep G2:	Negative
IF in U-2 OS:	Negative

# Western blot



<b>WB Size markers (kDa):</b>	250, 130, 100, 70, 55, 35, 25, 15, 10
<b>WB Lanes:</b>	Marker (1), RT4 (2), U-251 MG (3), Plasma (4), Liver (5), Tonsil (6)
<b>WB Target weight (kDa):</b>	13, 21, 21, 21, 32, 32
<b>WB Validation:</b>	Uncertain (No bands detected.)