

# CPTC-BCL2L1-1 (CAB080064)

Uniprot ID: [P10415](#)

Protein name: BCL2\_HUMAN

Full name: Apoptosis regulator Bcl-2

Tissue specificity: Expressed in a variety of tissues.

Function: Suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells (PubMed:1508712, PubMed:8183370). Regulates cell death by controlling the mitochondrial membrane permeability (PubMed:11368354). Appears to function in a feedback loop system with caspases (PubMed:11368354). Inhibits caspase activity either by preventing the release of cytochrome c from the mitochondria and/or by binding to the apoptosis-activating factor (APAF-1) (PubMed:11368354). Also acts as an inhibitor of autophagy: interacts with BECN1 and AMBRA1 during non-starvation conditions and inhibits their autophagy function (PubMed:18570871, PubMed:21358617, PubMed:20889974). May attenuate inflammation by impairing NLRP1-inflammasome activation, hence CASP1 activation and IL1B release (PubMed:17418785).

Subcellular location:

Mitochondrion outer membrane (*experimental evidence*) (Topo: Single-pass membrane protein (*match to sequence model*))

Nucleus membrane (*experimental evidence*) (Topo: Single-pass membrane protein (*match to sequence model*))

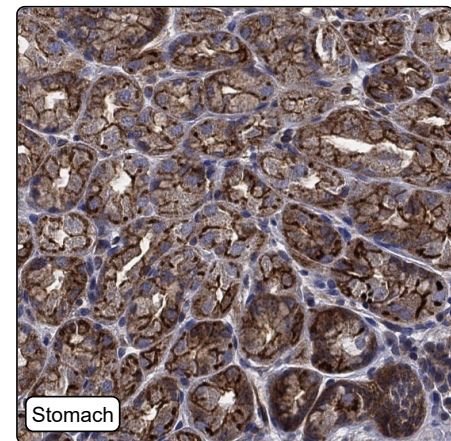
Endoplasmic reticulum membrane (*experimental evidence*) (Topo: Single-pass membrane protein (*match to sequence model*))

Cytoplasm (*by similarity*)

Protein existence: Experimental evidence at protein level

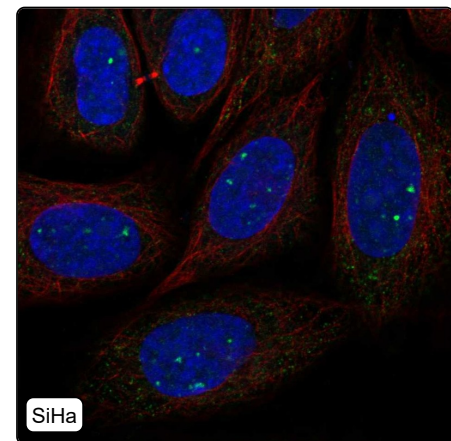
Comment:

## Immunohistochemistry



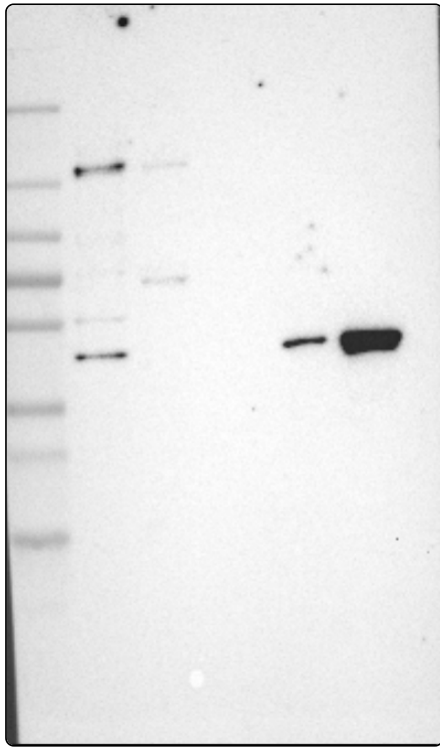
IHC protocol:	HIER pH6, Dilution 1:5000
IHC test staining:	Moderate cytoplasmic positivity in gastrointestinal tract and smooth muscle.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Low tissue specificity
RNA tissue distribution:	Detected in many
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern

## Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	Nuclear bodies - 12: <b>Uncertain</b> (auto)
IF additional location:	Plasma membrane - 12: <b>Uncertain</b> (auto)
IF approved for publication on HPA:	No
IF in SiHa:	Nuclear bodies
IF in SK-MEL-30:	Nuclear bodies Plasma membrane
IF in U-2 OS:	Nuclear bodies

# 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>	5, 6, 22, 26, 26
<b>WB Validation:</b>	Uncertain (Only bands not corresponding to the predicted size.)