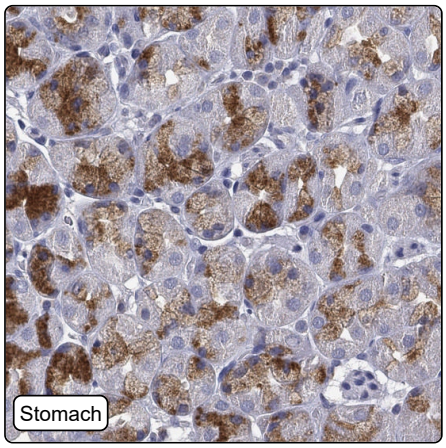
CPTC-BCL2L1-2 (CAB080083)

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

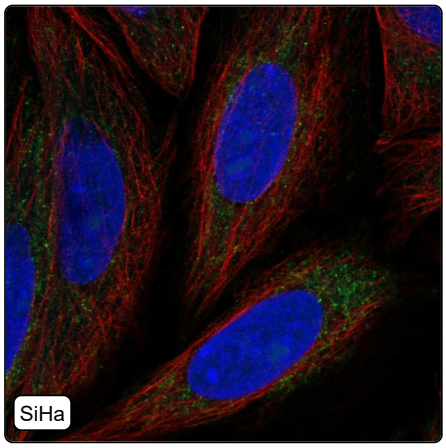
Comment:

Immunohistochemistry



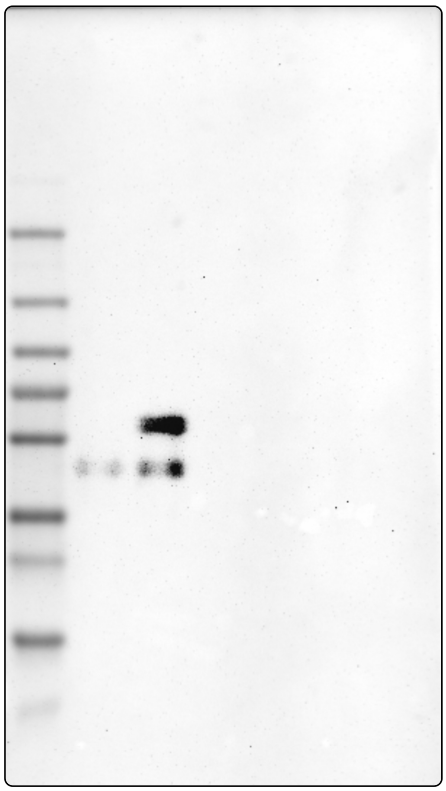
IHC protocol:	HIER pH6, Dilution 1:400
IHC test staining:	Cytoplasmic positivity in stomach and additional lipofuscin positivity in brain and liver.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody 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:	Mitochondria - 1 [3]: **Supportive** (auto)
IF additional location:	
IF approved for publication on HPA:	Yes
IF in SiHa:	Mitochondria
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):	5, 6, 22, 26, 26
WB Validation:	Uncertain (Only bands not corresponding to the predicted size.)