

Chloride intracellular channel protein 1

UniProt

Function: Can insert into membranes and form chloride ion channels. Channel activity depends on the pH. Membrane insertion seems to be redox-regulated and may occur only under oxydizing conditions. Involved in regulation of the cell cycle.

Subcellular location: Nucleus. Nucleus membrane; Single-pass membrane protein (probable). Cytoplasm. Cell membrane; Single-pass membrane protein (probable). *NOTE:* Mostly in the nucleus including in the nuclear membrane. Small amount in the cytoplasm and the plasma membrane. Exists both as soluble cytoplasmic protein and as membrane protein with probably a single transmembrane domain.

Tissue specificity: Expression is prominent in heart, placenta, liver, kidney and pancreas.

Two antibodies: CLIC1-1 and CLIC1-2 were tested. Both antibodies were approved for IHC. CLIC1-1 was selected for full protein profiling.

CLIC1-1 (CAB040557)

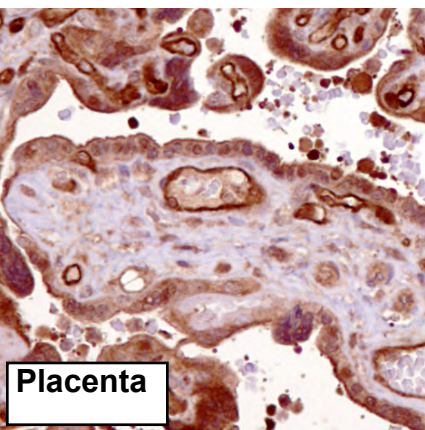
Immunohistochemistry

IHC protocol: HIER pH 6, Dilution 1:450

IHC test staining: Cytoplasmic staining in e.g. lymphoid tissues, placenta and kidney tubules.

IHC Annotators comments

Most of the normal tissues displayed moderate to strong cytoplasmic staining often combined with nuclear positivity. Hepatocytes, seminiferous duct cells, parathyroid and cells of CNS were weakly stained or negative. Malignant cells generally showed moderate to strong cytoplasmic immunoreactivity frequently combined with nuclear positivity. Most malignant gliomas as well as several skin and testicular cancers were negative.

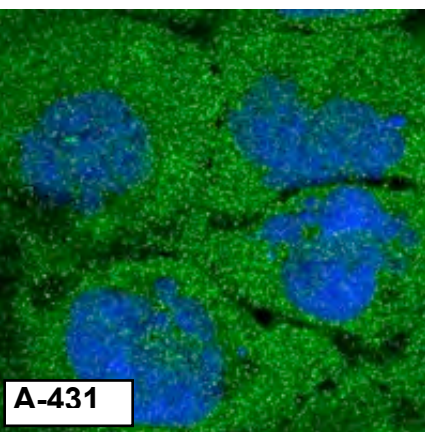


Immunofluorescence

IF Overlay: antibody (green), anti-tubuline (red) and DAPI (blue)

IF Localisation: Staining of nucleus and cytoplasm in all three cell lines.

IF Validation: Subcellular localization supported by literature.



Western blot

WB Size markers (kDa): 250, 130, 95, 72, 55, 36, 28, 17, 11

WB Lanes: Marker(1), RT-4(2), U251 MG(3), Plasma(4), Liver(5), Tonsil(6)

WB Target weight (kDa): 27

WB Validation: Supportive - Band of predicted size in kDa (+/-20%) with additional bands present.

