

# CHP2-1

**Uniprot ID:** O43745

**Protein name:** CHP2\_HUMAN

**Full name:** Calcineurin B homologous protein 2

**Protein existence:** evidence at protein level

**Function:** Functions as an integral cofactor in cell pH regulation by controlling plasma membrane-type Na<sup>+</sup>/H<sup>+</sup> exchange activity. Binds to and activates SLC9A1/NHE1 in a serum-independent manner, thus increasing pH and protecting cells from serum deprivation-induced death. Also plays a role in the regulation of cell proliferation and tumor growth by increasing the phosphatase activity of PPP3CA in a calcium-dependent manner. Activator of the calcineurin/NFAT signaling pathway. Involved in the cytoplasmic translocation of the transcription factor NFATC3 to the nucleus.

**Three antibodies: CHP2-1, CHP2-2 and CHP2-3 were tested. CHP2-1 was selected for full protein profiling.**

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## CHP2-1 (CAB072806)

OK



### Immunohistochemistry

**IHC protocol:** HIER pH 6, Dilution 1:65000

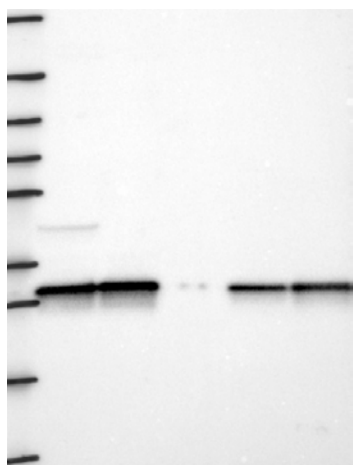
**IHC test staining:** Has a general nuclear and cytoplasmic positivity.

### IHC Annotators comments

Most normal tissues displayed moderate cytoplasmic and nuclear positivity. Airways epithelium, lung, exocrine glandular cells, cells in seminiferous ducts, prostate, neuronal cells and subset cells of gastrointestinal tract showed strong positivity. Hepatocytes were negative.

Most cancers exhibited moderate cytoplasmic and nuclear positivity. Additional membranous positivity was seen in renal, urothelial and pancreatic cancers. Rare cases of colorectal, breast, ovarian, cervical, endometrial, head and neck cancers showed strong positivity. Several hepatocellular carcinomas were weakly stained or negative.

### Pending Immunofluorescence



### Western blot

**WB Size markers (kDa):** 250, 130, 95, 72, 55, 36, 28, 17, 10

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

**WB Target weight (kDa):** 22.5

**WB Validation:** Not supportive (Only bands not corresponding to the predicted size)