For Research Use Only

# FUNDC2 Polyclonal antibody

Catalog Number:19832-1-AP

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

## Basic Information

Catalog Number:
19832-1-AP

Size:
150ul , Concentration: 400 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG13800

GenBank Accession Number:
BC000255

GeneID (NCBI):
65991

UNIPROT ID:
Q9BWH2

Full Name:
FUN14 domain containing 2

Calculated MW:
189 aa, 21 kDa

Observed MW:
21 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:50-1:500

## Applications

Tested Applications:
WB, IHC, ELISA

Species Specificity:
human

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : HeLa cells, HuH-7 cells, HepG2 cells

IHC : human stomach cancer tissue,

## Background Information

FUNDC2, or FUN14 domain-containing protein 2, is a mitochondrial outer membrane protein that plays a significant role in various cellular processes, including the regulation of cell survival, apoptosis, and metabolism. It has been implicated in the progression of several types of cancer, particularly in triple-negative breast cancer (TNBC) and liver cancer. In the context of cancer, FUNDC2 has been shown to promote tumorigenesis. It is associated with poor prognosis in hepatocellular carcinoma (HCC) and is involved in mitochondrial fragmentation by inhibiting MFN1-mediated mitochondrial fusion, which can lead to changes in cellular metabolism and energy levels. FUNDC2 also plays a role in platelet function and survival. It binds directly to phosphatidylinositol-3,4,5-trisphosphate (PIP3), which is a key lipid second messenger in cell signaling, and this interaction is crucial for the recruitment of PIP3 to mitochondria. FUNDC2 deficiency has been shown to decrease platelet aggregation and impair hemostasis in mice, highlighting its importance in platelet function.

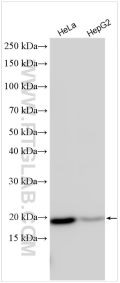
## Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

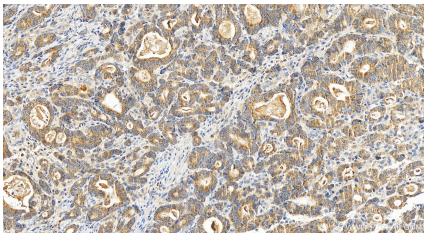
***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

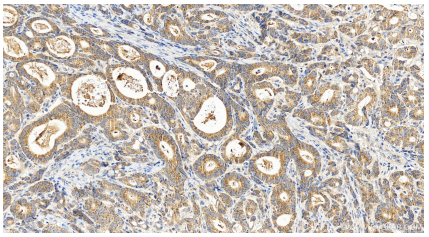
## Selected Validation Data




Various lysates were subjected to SDS PAGE followed by western blot with 19832-1-AP (FUNDC2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 19832-1-AP (FUNDC2 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 19832-1-AP (FUNDC2 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).