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Anti-FUNDC1 Antibody

Catalog # AP60171

Product Information

Application	WB, IF/IC
Primary Accession	Q8IVP5
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17178

Additional Information

Gene ID	139341
Other Names	FUN14 domain-containing protein 1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human FUNDC1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

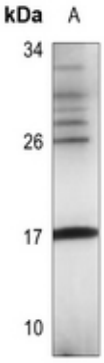
Name	FUNDC1
Function	Integral mitochondrial outer-membrane protein that mediates the formation of mitochondria-associated endoplasmic reticulum membranes (MAMs) (PubMed:33972548). In turn, mediates angiogenesis and neoangiogenesis through interference with intracellular Ca(2+) communication and regulation of the vascular endothelial growth factor receptor KDR/VEGFR2 expression at both mRNA and protein levels (PubMed:33972548). Also acts as an activator of hypoxia-induced mitophagy, an important mechanism for mitochondrial quality and homeostasis, by interacting with and recruiting LC3 protein family to mitochondria (PubMed:22267086, PubMed:24671035, PubMed:24746696, PubMed:27653272). Mechanistically, recruits DRP1 at ER-mitochondria contact sites leading to DRP1 oligomerization and GTPase activity to facilitate mitochondrial fission during hypoxia (PubMed:27145933, PubMed:33978709). Additionally, plays a role in hepatic ferroptosis by interacting directly with glutathione peroxidase/GPX4 to facilitate its recruitment into mitochondria through TOM/TIM complex where it is degraded by mitophagy

(PubMed:36828120).

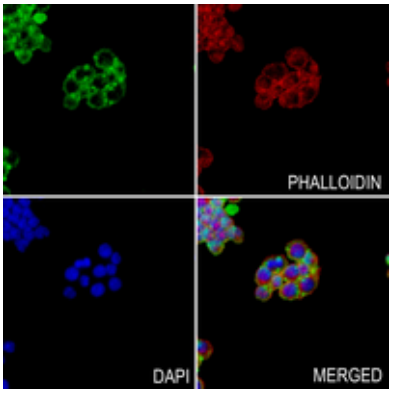
Cellular Location Mitochondrion outer membrane; Multi-pass membrane protein

Tissue Location Widely expressed..

Images



Western blot analysis of FUNDC1 expression in HEK293T (A) whole cell lysates. (Predicted band size: 17 kD; Observed band size: 17 kD)



Immunofluorescent analysis of FUNDC1 staining in MDAMB231 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.