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FUNDC1 Polyclonal Antibody

Catalog # AP73841

Product Information

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

Additional Information

Gene ID	139341
Other Names	FUNDC1; FUN14 domain-containing protein 1
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

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).

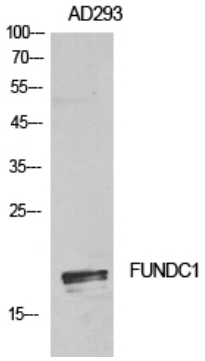
Cellular Location Mitochondrion outer membrane; Multi-pass membrane protein

Tissue Location Widely expressed..

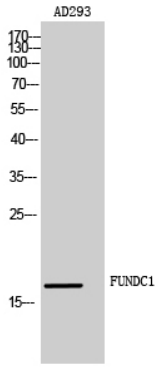
Background

Acts as an activator of hypoxia-induced mitophagy, an important mechanism for mitochondrial quality control.

Images



Western Blot analysis of AD293 cells using FUNDC1 Polyclonal Antibody. Antibody was diluted at 1:500. Secondary antibody was diluted at 1:20000



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