

SLP2 Rabbit mAb

Catalog # AP74881

Product Information

Application	WB, FC, IP
Primary Accession	Q9UJZ1
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	38534

Additional Information

Gene ID	30968
Other Names	STOML2
Dilution	WB~~1:500-1:1000 FC~~1:200-1:1000 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	STOML2
Synonyms	SLP2
Function	Mitochondrial protein that probably regulates the biogenesis and the activity of mitochondria. Stimulates cardiolipin biosynthesis, binds cardiolipin-enriched membranes where it recruits and stabilizes some proteins including prohibitin and may therefore act in the organization of functional microdomains in mitochondrial membranes. Through regulation of the mitochondrial function may play a role into several biological processes including cell migration, cell proliferation, T-cell activation, calcium homeostasis and cellular response to stress. May play a role in calcium homeostasis through negative regulation of calcium efflux from mitochondria. Required for mitochondrial hyperfusion a pro-survival cellular response to stress which results in increased ATP production by mitochondria. May also regulate the organization of functional domains at the plasma membrane and play a role in T-cell activation through association with

the T- cell receptor signaling complex and its regulation.

Cellular Location

Cell membrane; Peripheral membrane protein. Mitochondrion. Mitochondrion inner membrane; Lipid-anchor. Mitochondrion intermembrane space. Membrane raft. Cytoplasm, cytoskeleton
Note=Behaves as an integral membrane protein of the mitochondrion despite the absence of a detectable transmembrane domain (PubMed:21746876). Also associates with the actin cytoskeleton and membrane rafts in activated T-cells (PubMed:10713127, PubMed:18641330) A minor pool is associated with the plasma membrane and is enriched at the immunological synapse in activated T-cells (PubMed:22623988)

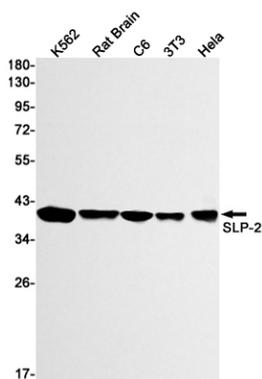
Tissue Location

Ubiquitously expressed at low levels. Expressed in lymphoid tissues (at protein level).

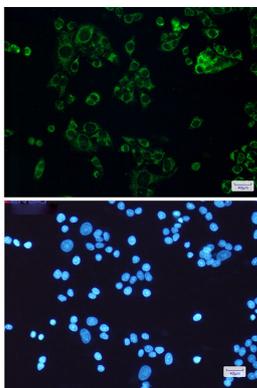
Background

Enables GTPase binding activity and cardiolipin binding activity. Involved in several processes, including inorganic cation transmembrane transport; positive regulation of cardiolipin metabolic process; and positive regulation of mitochondrial DNA replication. Located in membrane raft; mitochondrial inner membrane; and mitochondrial intermembrane space. Is extrinsic component of plasma membrane. Colocalizes with several cellular components, including COP9 signalosome; T cell receptor complex; and immunological synapse.

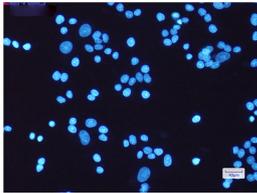
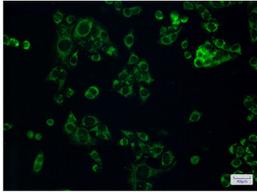
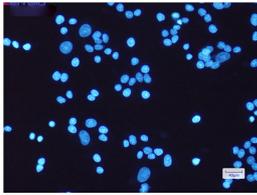
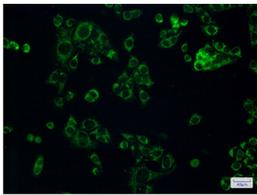
Images



Western blot analysis of SLP2 in K562, rat Brain, C6, 3T3, HeLa lysates using SLP2 antibody.



Immunocytochemistry analysis of SLP2(green) in HeLa using SLP2 antibody, and DAPI(blue)



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