

Product Information

Size:

50ul

Reactivity:

Human, Mouse

Source:

Rabbit

Isotype:

IgG

Applications:

ELISA, IHC

Recommended dilutions:

ELISA:1:1000-1:2000, IHC:1:25-1:100

Protein Background:

Mitochondrial inner membrane calcium uniporter that mediates calcium uptake into mitochondria. Constitutes the pore-forming and calcium-conducting subunit of the uniporter complex (uniporter). Activity is regulated by MICU1 and MICU2. At low Ca²⁺ levels MCU activity is down-regulated by MICU1 and MICU2; at higher Ca²⁺ levels MICU1 increases MCU activity. Mitochondrial calcium homeostasis plays key roles in cellular physiology and regulates cell bioenergetics, cytoplasmic calcium signals and activation of cell death pathways. Involved in buffering the amplitude of systolic calcium rises in cardiomyocytes. While dispensable for baseline homeostatic cardiac function, acts as a key regulator of short-term mitochondrial calcium loading underlying a 'fight-or-flight' response during acute stress: acts by mediating a rapid increase of mitochondrial calcium in pacemaker cells. participates in mitochondrial permeability transition during ischemia-reperfusion injury.

Gene ID:

SEMA7A

Uniprot

O75326

Synonyms:

semaphorin 7A, GPI membrane anchor (John Milton Hagen blood group)

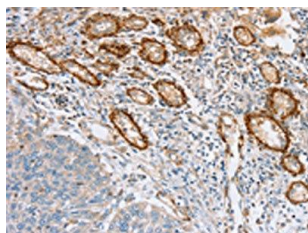
Immunogen:

Synthetic peptide of human SEMA7A.

Storage:

-20°C; C, pH7.4 PBS, 0.05% NaN₃, 40% Glycerol

Product Images



The image on the left is immunohistochemistry of paraffin-embedded Human lung cancer tissue using PACO20425(SEMA7A Antibody) at dilution 1/35, on the right is treated with synthetic peptide. (Original magnification: x—200).