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**Product Name: MICU1(Mix)Mouse Monoclonal Antibody****Catalog #: AMM13895**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,ICC/IF
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	PBS, pH 7.4, containing 0.5%protective protein, 0.02% New type preservative N as Preservative and 50% Glycerol.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:1000-1:2000,IHC 1:100-1:200,ICC/IF 1:100-1:200
<b>Molecular Weight</b>	55kDa

**Antigen Information**

<b>Gene Name</b>	MICU1
<b>Alternative Names</b>	Calcium uptake protein 1, mitochondrial; Atopy-related autoantigen CALC; ara CALC; Calcium-binding atopy-related autoantigen 1; allergen Hom s 4
<b>Gene ID</b>	10367.0
<b>SwissProt ID</b>	Q9BPX6
<b>Immunogen</b>	Recombinant Protein of MICU1

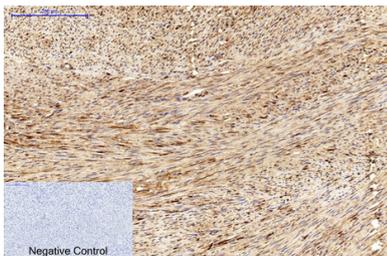
**Background**

This gene encodes an essential regulator of mitochondrial Ca<sup>2+</sup> uptake under basal conditions. The encoded protein interacts

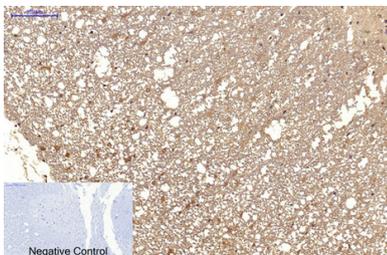
with the mitochondrial calcium uniporter, a mitochondrial inner membrane Ca<sup>2+</sup> channel, and is essential in preventing mitochondrial Ca<sup>2+</sup> overload, which can cause excessive production of reactive oxygen species and cell stress. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Mar 2013],allergen:Causes an allergic reaction in human. Binds to IgE from atopic dermatitis (AD) patients. Identified as an IgE autoantigen in atopic dermatitis (AD) patients with severe skin manifestations.,function:Induces T helper 1-mediated autoreactivity, which is accompanied by the release of IFNG.,sequence caution:Contaminating sequence. Sequence of unknown origin in the N-terminal part.,similarity:Contains 2 EF-hand domains.,tissue specificity:Expressed in epithelial cell line. Strongly expressed in epidermal keratinocytes and dermal endothelial cells.,

## Research Area

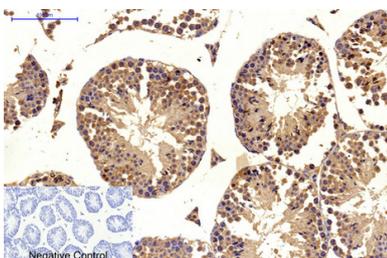
### Image Data



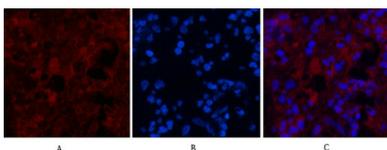
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,MICU1 Monoclonal Antibody (Mix) was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was used by secondary antibody only.



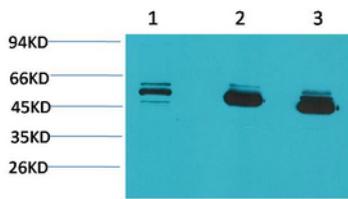
Immunohistochemical analysis of paraffin-embedded Rat-spinal-cord tissue. 1,MICU1 Monoclonal Antibody (Mix) was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was used by secondary antibody only.



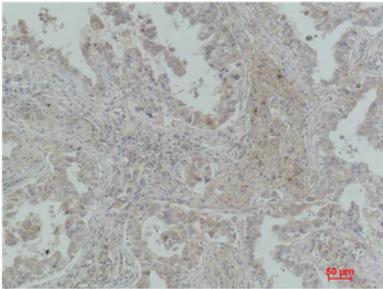
Immunohistochemical analysis of paraffin-embedded Mouse-testis tissue. 1,MICU1 Monoclonal Antibody (Mix) was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was used by secondary antibody only.



Immunofluorescence analysis of Human-appendix tissue. 1,MICU1 Monoclonal Antibody (Mix) (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) . 3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of 1) MCF7, 2) Mouse Brain Tissue, 3) Rat Brain Tissue using MICU1 Monoclonal Antibody.



Immunohistochemical analysis of paraffin-embedded Human Lung Carcinoma using MICU1 Monoclonal Antibody.