



MICU1 Monoclonal Antibody(Mix)

Catalog No	YP-Ab-01144
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;IHC
Gene Name	MICU1
Protein Name	Calcium uptake protein 1, mitochondrial
Immunogen	Recombinant Protein of MICU1
Specificity	The antibody detects endogenous MICU1 protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1:1000-2000 IHC: 1:100-200 IF 1:200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Calcium uptake protein 1, mitochondrial; Atopy-related autoantigen CALC; ara CALC; Calcium-binding atopy-related autoantigen 1; allergen Hom s 4
Observed Band	55kD
Cell Pathway	Mitochondrion inner membrane ; Single-pass membrane protein . Mitochondrion intermembrane space .
Tissue Specificity	Expressed in epithelial cell lines. Strongly expressed in epidermal keratinocytes and dermal endothelial cells.
Function	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.,
Background	This gene encodes an essential regulator of mitochondrial Ca ²⁺ uptake under basal conditions. The encoded protein interacts with the mitochondrial calcium uniporter, a mitochondrial inner membrane Ca ²⁺ channel, and is essential in preventing mitochondrial Ca ²⁺ 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],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

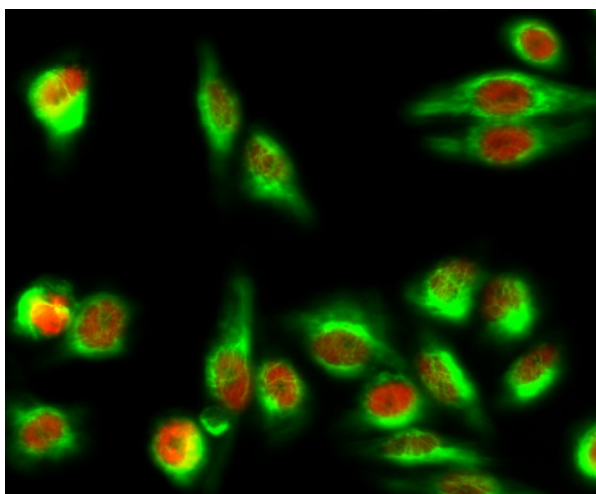
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

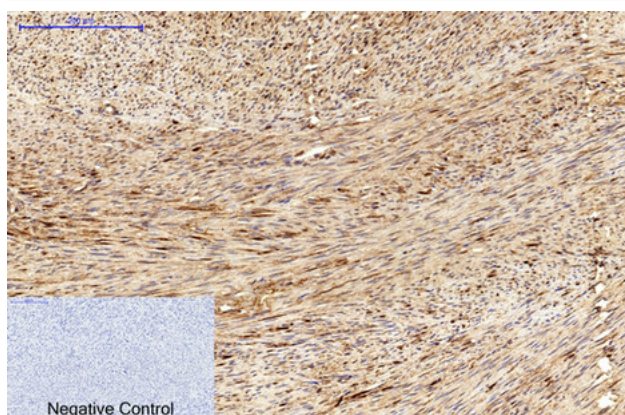
Figure 1



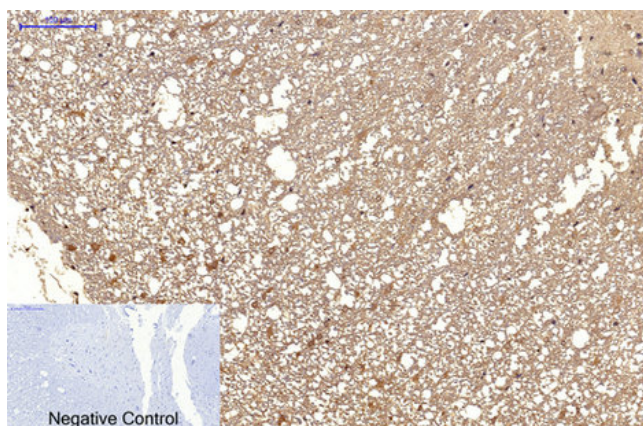
Xue, Qiang, et al. "MICU1 protects against myocardial ischemia/reperfusion injury and its control by the importer receptor Tom70." *Cell death & disease* 8.7 (2017): e2923.



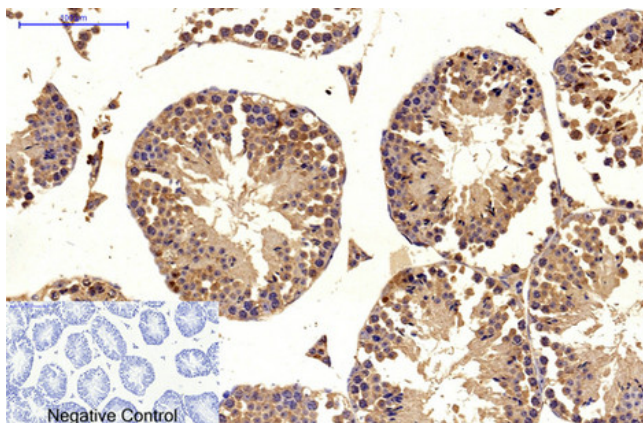
Immunofluorescence analysis of Hela cell. 1, c-Myc Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). MICU1 Monoclonal Antibody (Mix) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



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.