

## ARG66180 anti-MICU1 / CBARA1 antibody

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody recognizes MICU1 / CBARA1
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Specificity	The antibody detects endogenous MICU1 protein.
Host	Mouse
Clonality	Monoclonal
Target Name	MICU1 / CBARA1
Species	Human
Immunogen	Recombinant Protein of Human MICU1 / CBARA1.
Conjugation	Un-conjugated
Alternate Names	MPXPS; allergen Hom s 4; Calcium uptake protein 1, mitochondrial; Atopy-related autoantigen CALC; CBARA1; ara CALC; CALC; Calcium-binding atopy-related autoantigen 1; EFHA3

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:100 - 1:200
	WB	1:1000 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

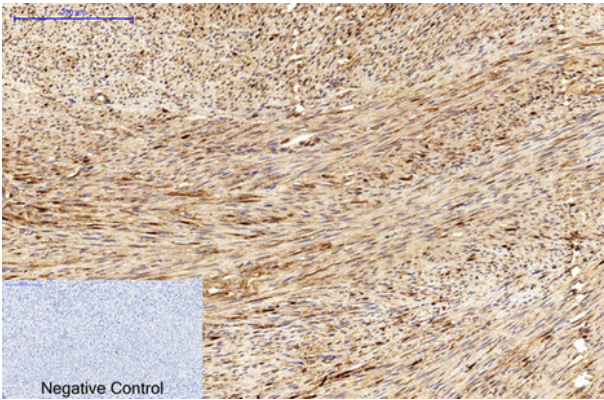
### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	MICU1
Gene Full Name	mitochondrial calcium uptake 1
Background	This gene encodes an essential regulator of mitochondrial Ca2+ uptake under basal conditions. The encoded protein interacts with the mitochondrial calcium uniporter, a mitochondrial inner membrane Ca2+ channel, and is essential in preventing mitochondrial Ca2+ 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]
Function	Key regulator of mitochondrial calcium uniporter (MCU) required to increase calcium uptake by MCU when cytoplasmic calcium is high. MICU1 and MICU2 form a disulfide-linked heterodimer that stimulate and inhibit MCU activity, respectively. MICU1 acts as a stimulator of MCU that senses calcium level via its EF-hand domains: enhances MCU opening at high Ca(2+) concentration, allowing a rapid response of mitochondria to Ca(2+) signals generated in the cytoplasm. Regulates glucose-dependent insulin secretion in pancreatic beta-cells by regulating mitochondrial calcium uptake. Induces T-helper 1-mediated autoreactivity, which is accompanied by the release of IFNG. [UniProt]
Calculated Mw	54 kDa

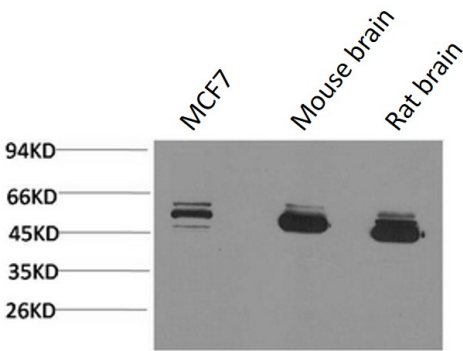
Images



ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

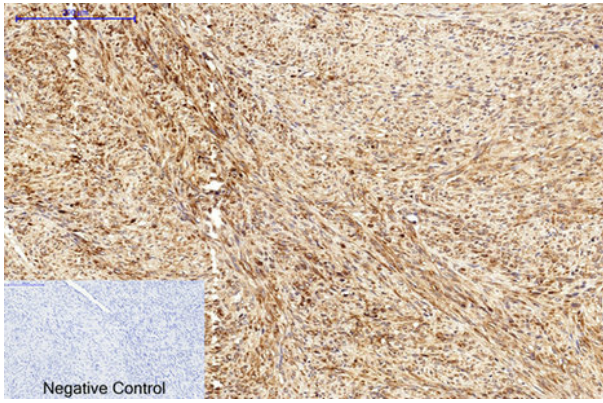
Immunohistochemistry: Paraffin-embedded Human uterus tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

Negative control was used by secondary antibody only.



ARG66180 anti-MICU1 / CBARA1 antibody WB image

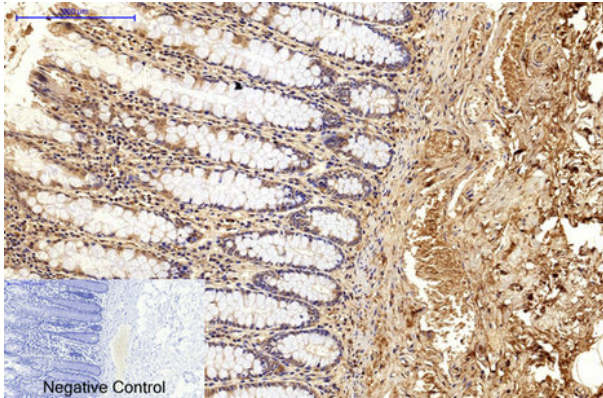
Western blot: 1) MCF7, 2) Mouse brain, and 3) Rat brain lysates stained with ARG66180 anti-MICU1 / CBARA1 antibody.



#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human uterus cancer tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

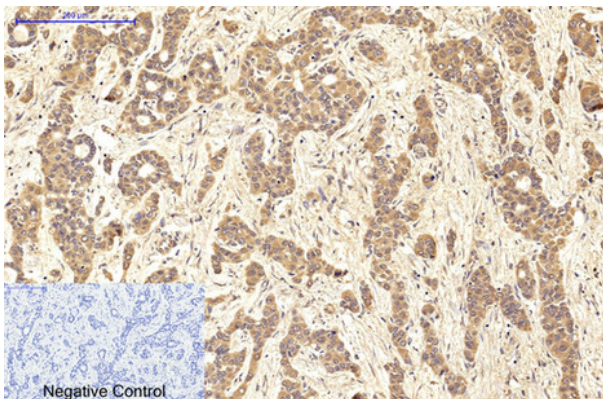
Negative control was used by secondary antibody only.



#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

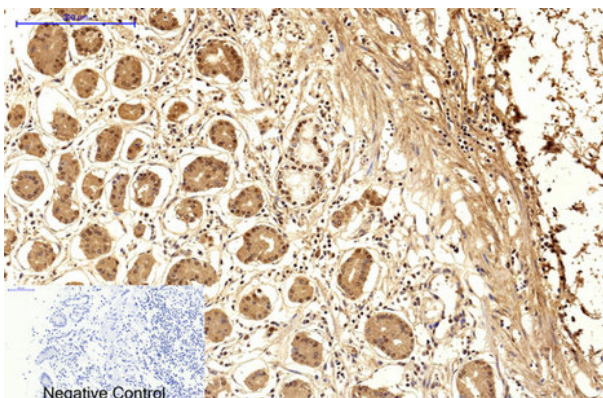
Negative control was used by secondary antibody only.



#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver cancer tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

Negative control was used by secondary antibody only.

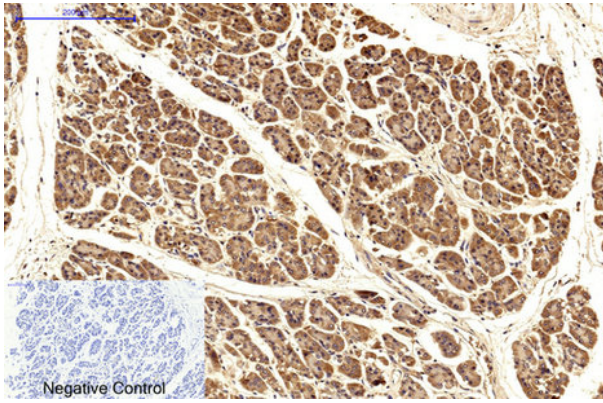


#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

Negative control was used by secondary antibody only.

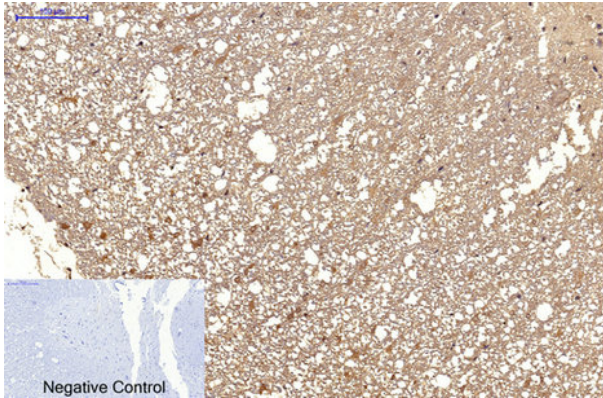




#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach cancer tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

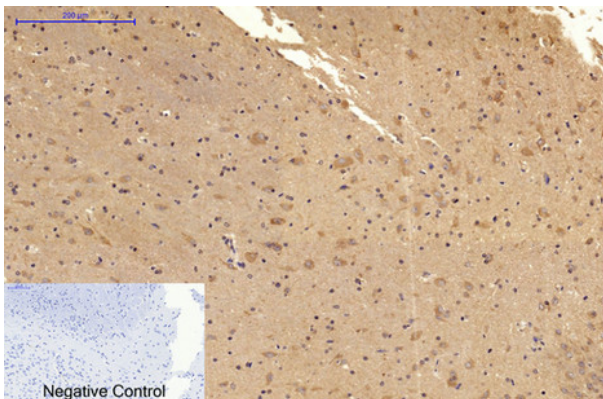
Negative control was used by secondary antibody only.



#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat spinal-cord tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

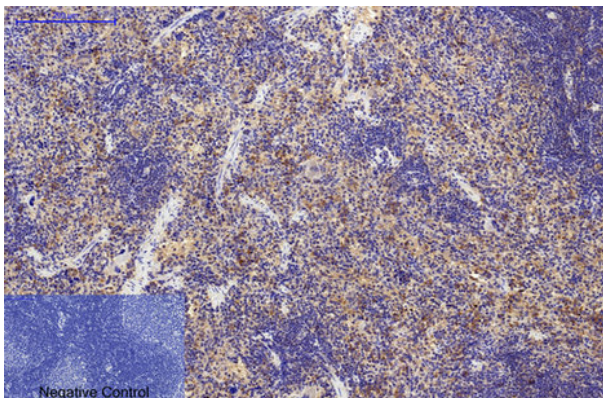
Negative control was used by secondary antibody only.



#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat brain tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

Negative control was used by secondary antibody only.

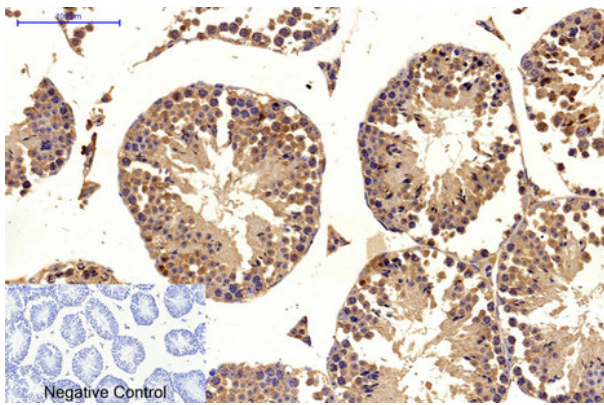


#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat spleen tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

Negative control was used by secondary antibody only.

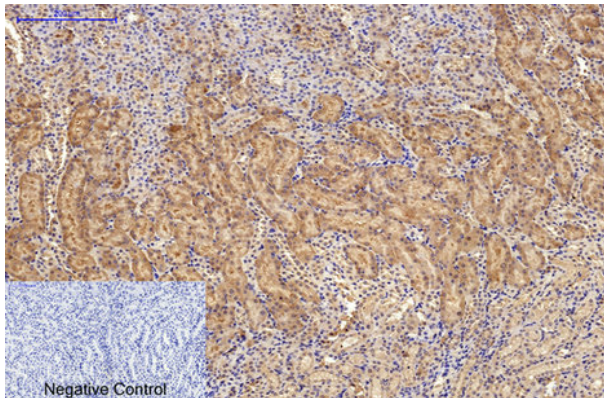




#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse testis tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

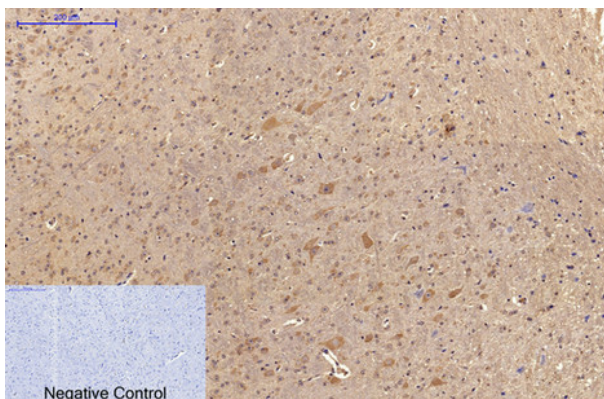
Negative control was used by secondary antibody only.



#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse kidney tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

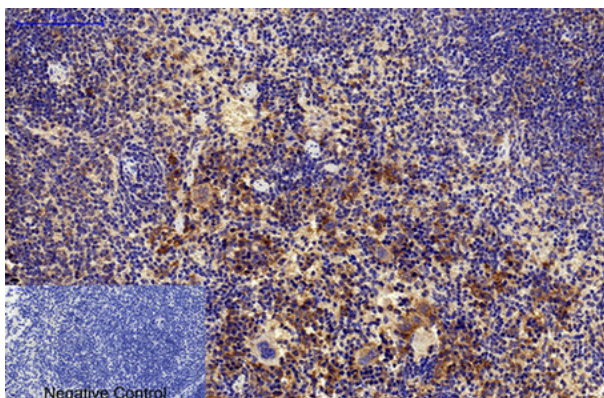
Negative control was used by secondary antibody only.



#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

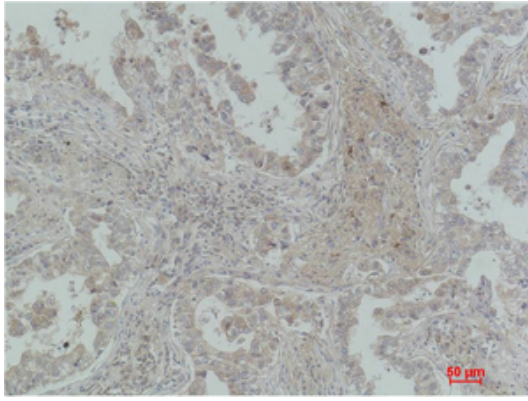
Negative control was used by secondary antibody only.



#### ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse spleen tissue stained with ARG66180 anti-MICU1 / CBARA1 antibody at 1:200 dilution (4°C, overnight). Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min.

Negative control was used by secondary antibody only.



ARG66180 anti-MICU1 / CBARA1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human Lung Carcinoma stained with ARG66180 anti-MICU1 / CBARA1 antibody.