

# Product datasheet

info@arigobio.com

ARG57750 anti-SIRT3 antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes SIRT3

Tested Reactivity Hu, Ms, Rat

Tested Application ICC/IF, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name SIRT3

Species Human

Immunogen Synthetic peptide from Human SIRT3.

Conjugation Un-conjugated

Alternate Names NAD-dependent protein deacetylase sirtuin-3, mitochondrial; SIR2L3; hSIRT3; EC 3.5.1.-; Regulatory

protein SIR2 homolog 3; SIR2-like protein 3

## **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse liver	
Observed Size	~ 44 kDa	

## **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

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.

#### Bioinformation

Gene Symbol SIRT3

Gene Full Name sirtuin 3

Background This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein.

Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Two alternatively spliced transcript variants that encode different proteins have been described for this gene. [provided

by RefSeq, Jul 2008]

Function NAD-dependent protein deacetylase. Activates or deactivates mitochondrial target proteins by

deacetylating key lysine residues. Known targets include ACSS1, IDH, GDH, SOD2, PDHA1, LCAD, SDHA and the ATP synthase subunit ATP5O. Contributes to the regulation of the cellular energy metabolism.

Important for regulating tissue-specific ATP levels. [UniProt]

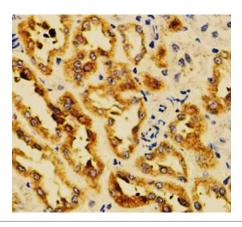
Calculated Mw 44 kDa

PTM Processed by mitochondrial processing peptidase (MPP) to give a 28 kDa product. Such processing is

probably essential for its enzymatic activity. [UniProt]

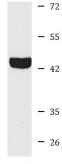
Cellular Localization Mitochondrion matrix [UniProt]

## **Images**



#### ARG57750 anti-SIRT3 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney stained with ARG57750 anti-SIRT3 antibody at 1:100 dilution.



#### Mouse liver

#### ARG57750 anti-SIRT3 antibody WB image

Western blot: 25  $\mu g$  of Mouse liver lysate stained with ARG57750 anti-SIRT3 antibody at 1:1000 dilution.