

For Research Use Only

CoraLite® Plus 750-conjugated SIRT1 Polyclonal antibody

Catalog Number: CL750-13161

Featured Product



Basic Information

Catalog Number:

CL750-13161

Concentration:

1000 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3808

GenBank Accession Number:

BC012499

GeneID (NCBI):

23411

UNIPROT ID:

Q96EB6

Full Name:

sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae)

Calculated MW:

747 aa, 82 kDa

Observed MW:

110-130 kDa, 80-85 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:1000

FC (Intra): 0.80 µg per 10⁶ cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:

755 nm / 780 nm

Applications

Tested Applications:

WB, FC (Intra)

Species Specificity:

human

Positive Controls:

WB: HeLa cells, MDA-MB-231 cells

FC (Intra): A431 cells,

Background Information

SIRT1, also named as SIR2L1, contains a deacetylase sirtuin-type domain and belongs to the sirtuin family. The post-translation modified SIRT1 is a 110-130 kDa protein, which contains one deacetylase sirtuin-type domain. The 75-80 kDa SirT1 fragment was detected to lack the carboxy-terminus (PMID:21305533). SirT1 exists a 57-61 kDa isoform. SIRT1 may be found in nucleolus, nuclear euchromatin, heterochromatin, and inner membrane. It can shuttle between the nucleus and cytoplasm. SIRT1 regulates processes such as apoptosis and muscle differentiation by deacetylating key proteins. SIRT1 in particular initiates several signaling events relevant to cardioprotection, including activation of endothelial nitric oxide synthase, INS receptor signaling, and autophagy. In addition, SIRT1 activation elicits resistance to oxidative stress via the regulation of transcription factors and co-activators such as FOXO, Hif-2α, and NF-κB. SIRT1 regulates the p53-dependent DNA damage response pathway by binding to and deacetylating p53, specifically at Lysine 382. This antibody is a rabbit polyclonal antibody raised against residues near the N terminus of human SIRT1.

Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

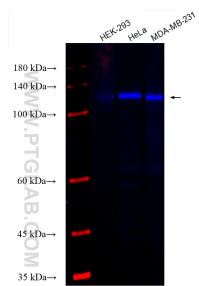
T: 4006900926

E: Proteintech-CN@ptglab.com

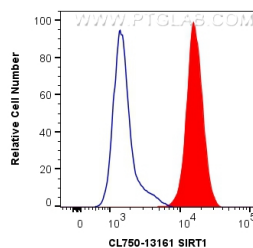
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with CL750-13161 (SIRT1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



1×10^6 A431 cells were intracellularly stained with 0.8 μ g CoraLite® Plus 750 Anti-Human SIRT1 (CL750-13161) (red), or 0.8 μ g Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).