

# CoraLite® Plus 750-conjugated SIRT1 Polyclonal antibody

Catalog Number: **CL750-13161****Featured Product**

## Basic Information

**Catalog Number:**

CL750-13161

**Size:**

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

**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

## 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, pH 7.3.

Aliquoting is unnecessary for -20°C storage

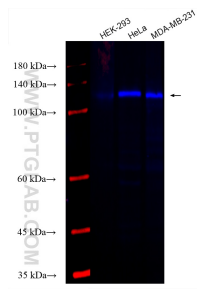
For technical support and original validation data for this product please contact:

T: 4006900926

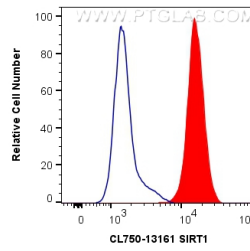
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## Selected Validation Data



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.



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