For Research Use Only

CoraLite® Plus 750-conjugated SIRT1 Polyclonal antibody



Catalog Number: CL750-13161

Featured Product

Basic Information

Catalog Number: GenBank Accession Number:

CL750-13161 BC012499 GeneID (NCBI): 100ul , Concentration: 1000 $\mu g/ml$ by 23411

Nanodrop: **UNIPROT ID:** Q96EB6 Rabbit Full Name:

Isotype: sirtuin (silent mating type

information regulation 2 homolog) 1 IgG

(S. cerevisiae) Immunogen Catalog Number: Calculated MW: AG3808 747 aa, 82 kDa

> Observed MW: 110-130 kDa, 80-85 kDa

Applications

Tested Applications: WB, FC (Intra) Species Specificity:

human

Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:500-1:1000 Excitation/Emission maxima

wavelengths: 755 nm / 780 nm

Background Information

SIRT1, also named as SIR2L1, contains a deacetylase sirtuin-type domain and belongs to the sirtuin family. The posttranslation 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-2a, and NF-kB. 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.

Positive Controls:

WB: HeLa cells, MDA-MB-231 cells

Storage

Storage:

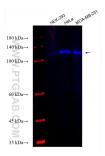
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

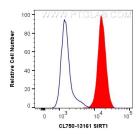
Aliquoting is unnecessary for -20°C storage

in USA), or 1(312) 455-8498 (outside USA)

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.



1X10^6 A431 cells were intracellularly stained with 0.8 ug CoraLite® Plus 750 Anti-Human SIRT1 (CL750-13161) (red), or 0.8 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).