Product datasheet

Anti-SIRT6 antibody - ChIP Grade ab62739

Overview

Product name: Anti-SIRT6 antibody - ChIP Grade
Description: Rabbit polyclonal to SIRT6 - ChIP Grade
Host species: Rabbit
Tested applications: Suitable for: WB, ICC/IF, ChIP, IHC-P, CHIPseq, Flow Cyt
Species reactivity: Reacts with: Mouse, Rat, Chicken, Human
Predicted to work with: Cow
Immunogen: Synthetic peptide:
GLPEIFDPPEELERK
conjugated to KLH by a Cysteine residue linker, corresponding to N terminal amino acids 19-33
of Human SIRT6
Positive control: Recombinant Human SIRT6 protein (ab78879) can be used as a positive control in WB. Extracts of human U87 cells, extracts of mouse 3T3 cells.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer: pH: 7.40
Preservative: 0.097% Sodium azide
Constituent: 0.0268% PBS
Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab62739 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
### Function
NAD-dependent protein deacetylase. Has deacetylase activity towards histone H3K9Ac and H3K56Ac. Modulates acetylation of histone H3 in telomeric chromatin during the S-phase of the cell cycle. Deacetylates histone H3K9Ac at NF-kappa-B target promoters and may down-regulate the expression of a subset of NF-kappa-B target genes. Acts as a corepressor of the transcription factor HIF1A to control the expression of multiple glycolytic genes to regulate glucose homeostasis. Required for genomic stability. Regulates the production of TNF protein. Has a role in the regulation of life span (By similarity). Deacetylation of nucleosomes interferes with RELA binding to target DNA. May be required for the association of WRN with telomeres during S-phase and for normal telomere maintenance. Required for genomic stability. Required for normal IGF1 serum levels and normal glucose homeostasis. Modulates cellular senescence and apoptosis. On DNA damage, promotes DNA end resection via deacetylation of RBBP8. Has very weak deacetylase activity and can bind NAD(+) in the absence of acetylated substrate.

### Sequence similarities
Belongs to the sirtuin family. Class IV subfamily. Contains 1 deacetylase sirtuin-type domain.

### Cellular localization
Nucleus, nucleoplasm. Predominantly nuclear. Associated with telomeric heterochromatin regions.

### Application | Abreviews | Notes
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WB |  | Use at an assay dependent concentration. Detects a band of approximately 37 kDa (predicted molecular weight: 37 kDa). 2-4 ug/mL is recommended using whole extracts of mouse 3T3 cells. Use at 1-2 ug/mL with whole extracts of human U87 cells. Detects a band of approximately 37 kDa (predicted molecular weight: 39 (human), 37 mouse kDa (mouse)).

ICC/IF |  | Use at an assay dependent concentration.

ChIP |  | Use at an assay dependent concentration.

IHC-P |  | 1/200.

CHIPseq |  | Use at an assay dependent concentration. PubMed: 22196736

Flow Cyt |  | 1/200.

**ab171870** - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

**Images**
ChIP analysis using ab62739 binding SIRT6 in mouse primary hepatocytes. Cells were cross-linked for 8 minutes with 1% formaldehyde. Samples were incubated with Anti-SIRT6 antibody - ChIP Grade (ab62739) (1/200) for 20 hours at 4°C. Protein binding was detected using real-time PCR.

Immunocytochemistry/ Immunofluorescence analysis of HeLa cells labeling SIRT6 with ab62739. Cells were fixed and permeabilized with 4% paraformaldehyde followed by 0.5% Triton™ X-100. Fixed cells were stained with 2.5 μg/mL Anti-SIRT6 antibody - ChIP Grade (ab62739). The antibody was developed using Goat Anti-Rabbit IgG, Cy3™ conjugate.
Western blot - Anti-SIRT6 antibody - ChIP Grade (ab62739)

Lane 1: Anti-SIRT6 antibody - ChIP Grade (ab62739) at 0.5 µg/ml
Lane 2: Anti-SIRT6 antibody - ChIP Grade (ab62739) at 1 µg/ml
Lanes 3-4: Anti-SIRT6 antibody - ChIP Grade (ab62739) at 2 µg/ml

Lanes 1-3: Mouse 3T3 whole cell extract
Lane 4: Mouse 3T3 whole cell extract with immunizing peptide

Secondary
All lanes: Goat Anti-Rabbit IgG,

Developed using the ECL technique.

Predicted band size: 37 kDa
Observed band size: 37 kDa
why is the actual band size different from the predicted?

Immunocytochemistry/Immunofluorescence analysis of mouse primary hepatocytes labeling SIRT6 with ab62739 at 1/200 dilution. The cells were fixed with paraformaldehyde, followed by blocking with 3% BSA for 2 hours at 20°C. A polyclonal goat anti-rabbit IgG Alexa Fluor® 488 secondary antibody was used at 1/10000 dilution.

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