

Datasheet for ABIN3134564

SIRT6 Protein (AA 2-334) (His tag)



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Overview

Quantity:	1 mg
Target:	SIRT6
Protein Characteristics:	AA 2-334
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SIRT6 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>SVNYAAGLSP YADKGKCGLP EIFDPPEELE RKVWELARLM WQSSSVVFHT GAGISTASGI PDFRGPHGVW TMEERGLAPK FDTTFENARP SKTHMALVQL ERMGFLSFLV SQNVDGLHVR SGFPRDKLAE LHGNMFVEEC PKCKTQYVRD TVVGTMGLKA TGRLECTVAKT RGLRACRGEL RDTILDWEDS LPDRDLMLAD EASRTADLSV TLGTSLQIRP SGNLPLATKR RGGRLVIVNL QPTKHDRQAD LRIHGYVDEV MCRLMKHLGL EIPAWDGPCV LDKALPPLPR PVALKAEPPV HLNGAVHVSYS KSKPNSPILH RPPKRVKTEA APS</p> <p>Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.</p>
Characteristics:	<ul style="list-style-type: none"> • Made in Germany - from design to production - by highly experienced protein experts. • Mouse Sirt6 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • State-of-the-art algorithm used for plasmid design (Gene synthesis).

Product Details

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	SIRT6
Alternative Name:	Sirt6 (SIRT6 Products)
Background:	NAD-dependent protein deacetylase. Has deacetylase activity towards histone H3K9Ac and

Target Details

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. 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. 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 (By similarity). 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. Required for normal IGF1 serum levels and normal glucose homeostasis. Modulates cellular senescence and apoptosis. Regulates the production of TNF protein. Has a role in the regulation of life span in male mice, but not in female mice. {ECO:0000250, ECO:0000269|PubMed:16439206, ECO:0000269|PubMed:19135889, ECO:0000269|PubMed:19151729, ECO:0000269|PubMed:19220062, ECO:0000269|PubMed:19597350, ECO:0000269|PubMed:20141841, ECO:0000269|PubMed:22367546}.

Molecular Weight: 37.7 kDa Including tag.

UniProt: [P59941](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)