

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Sirtuin 5/SIRT5 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) SIRT1, rhSIRT2, and rhSIRT6 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Sirtuin 5/SIRT5 Met33-Ser310 Accession # Q9NXA8
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunoprecipitation	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Sirtuin 5 (SIRT5; SIR2-like protein 5) is a 28-35 kDa class III member of the sirtuin protein family. It is found in the mitochondrial matrix and is involved in ammonia detoxification. In particular, it deacetylates carbamoyl phosphate synthetase 1/CPS1, thus activating it and allowing for ammonia condensation with bicarbonate and ATP. This is a crucial step in urea formation during prolonged fasting or the use of a high-protein diet. Human SIRT5 is 310 amino acids (aa) in length. It possesses a sirtuin-type deacetylase domain (aa 41-309) that contains an NAD binding motif (Thr276:Glu277:Pro292). There are three potential isoform variants that show aa substitutions at the C-terminus. One contains a 14 aa substitution for aa 286-310, a second shows a 15 aa substitution for aa 287-310, and the third shows a 17 aa substitution for aa 207-310. Full-length human and mouse SIRT5 share 86% aa identity.

PRODUCT SPECIFIC NOTICES

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