

Anti-SIRT1 Antibody [PCRP-SIRT1-1E11] (A277616)

Specifications:

| | |
|------------------------|---|
| Name: | Anti-SIRT1 Antibody [PCRP-SIRT1-1E11] |
| Description: | Mouse monoclonal [PCRP-SIRT1-1E11] antibody to SIRT1. |
| Specificity: | The silent information regulator (SIR2) family of genes are highly conserved from prokaryotes to eukaryotes and are involved in diverse processes, including transcriptional regulation, cell cycle progression, DNA damage repair and aging. In <i>S. cerevisiae</i> , Sir2p deacetylates histones in an NAD-dependent manner, which regulates silencing at the telomeric, rDNA and silent matingtype loci. Sir2p is the founding member of a large family, designated sirtuins, which contain a conserved catalytic domain. The human homologs, which include SIRT1-7, are divided into four main branches: SIRT1-3 are class I, SIRT4 is class II, SIRT5 is class III and SIRT6-7 are class IV. SIRT1 has the closest homology to the yeast Sir2p and is widely expressed in fetal and adult tissues, with high expression in heart, brain and skeletal muscle and low expression in lung and placenta. SIRT1 regulates the p53-dependent DNA damage response pathway by binding to and deacetylating p53, specifically at Lysine 382. |
| Applications: | ELISA, IP, Flow Cytometry, IF, WB |
| Recommended Dilutions: | IP: 1-2 μ g / 100-500 μ g proteins, Flow Cytometry: 1-2 μ g/million cells, IF: 1-2 μ g/ml, WB: 1-2 μ g/ml |
| Reactivity: | Human |
| Immunogen: | Recombinant full-length human SIRT1 protein. |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Clone ID: | PCRP-SIRT1-1E11 |
| Isotype: | IgG1 |
| Conjugate: | Unconjugated |
| Purification: | Protein A/G chromatography. |
| Concentration: | 200 μ g/ml |
| Product Form: | Liquid |
| Formulation: | Supplied in 10mM Phosphate Buffered Saline with 0.05% BSA and 0.05% Sodium Azide. |
| Storage: | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. |

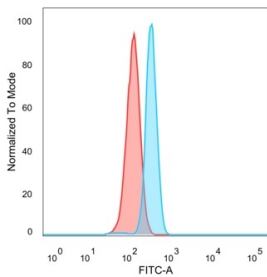
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Specifications continued:

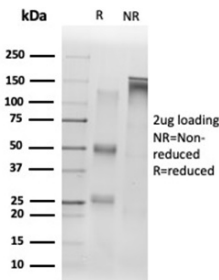
General Notes: This monoclonal antibody is also available in a different formulation without BSA and Sodium Azide - Anti-SIRT1 Antibody [PCRP-SIRT1-1E11] - BSA and Azide free (A278204).

Disclaimer: This product is for research use only. It is not intended for diagnostic or therapeutic use.

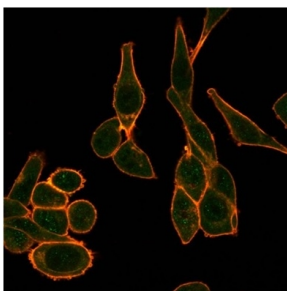
Images:



Flow cytometric analysis of PFA-fixed HeLa cells using Anti-SIRT1 Antibody [PCRP-SIRT1-1E11] followed by Goat Anti-Mouse IgG (CF® 488) (Blue). Isotype Control (Red).



SDS-PAGE analysis of Anti-SIRT1 Antibody [PCRP-SIRT1-1E11] under non-reduced and reduced conditions; showing intact IgG and intact heavy and light chains, respectively. SDS-PAGE analysis confirms the integrity and purity of the antibody.



Immunofluorescent analysis of PFA-fixed HeLa cells stained with Anti-SIRT1 Antibody [PCRP-SIRT1-1E11] followed by Goat Anti-Mouse IgG (CF® 488) (Blue). Isotype Control (Red).

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Images continued:



Analysis of protein array containing more than 19,000 full-length human proteins using Anti-SIRT1 Antibody [PCRP-SIRT1-1E11]. Z-Score and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target; a MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.