

Sirtuin1 (SIRT1) Antibody

Mouse Monoclonal Antibody [Clone PCR-P-SIRT1-1E11]

Catalog No	Format	Size
23411-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
23411-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
23411-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

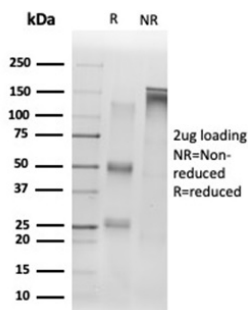
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Western Blot (WB)	2-4ug/ml	

Product Details

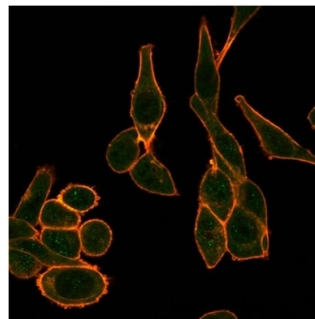
Clone	PCR-P-SIRT1-1E11
Gene Name	SIRT1
Immunogen	Recombinant full-length human SIRT1protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1
Mol. Weight of Antigen	120kDa
Cellular Localization	Cytoplasm, Mitochondrion, Nucleus, PML body
Species Reactivity	Human
Positive Control	HeLa or HepG2 cells.

*Optimal dilution for a specific application should be determined.

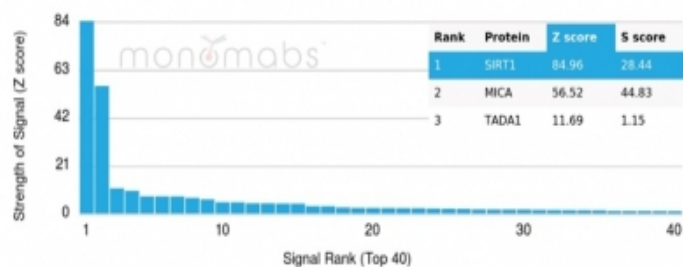
Product Images for Sirtuin1 (SIRT1) Antibody



SDS-PAGE Analysis of Purified SIRT1 Mouse Monoclonal Antibody (PCR-P-SIRT1-1E11). Confirmation of Purity and Integrity of Antibody.



Immunofluorescence Analysis of PFA-fixed HeLa cells stained using SIRT1 Mouse Monoclonal Antibody (PCR-P-SIRT1-1E11) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



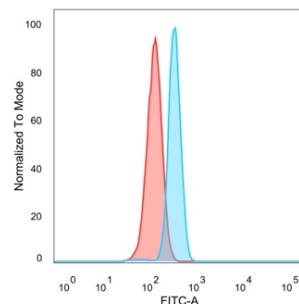
Analysis of Protein Array containing more than 19,000 full-length human proteins using SIRT1-Monospecific Mouse Monoclonal Antibody (PCRP-SIRT1-1E11). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG 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.

Specificity & Comments

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 *S. cerevisiae*, Sir2p deacetylates histones in an NAD-dependent manner, which regulates silencing at the telomeric, rDNA and silent mating type 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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.



Flow cytometric analysis of PFA-fixed HeLa cells. SIRT1 Mouse Monoclonal Antibody (PCRP-SIRT1-1E11) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Apoptosis, Autophagy, Cardiovascular, Nuclear Marker, Transcription Factors