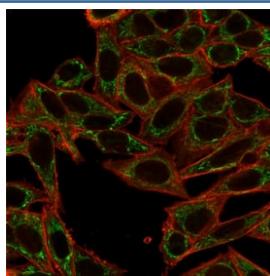


## Sirtuin 2 Antibody / SIRT2 [clone PCRP-SIRT2-1A8] (V9228)

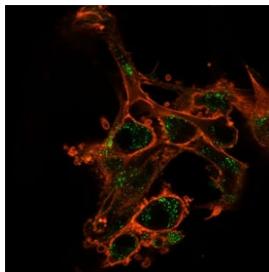
Catalog No.	Formulation	Size
V9228-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9228-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9228SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

**Bulk quote request**

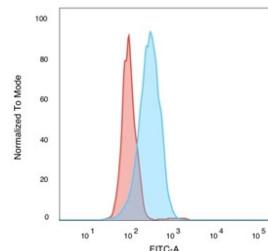
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1
<b>Clone Name</b>	PCRP-SIRT2-1A8
<b>Purity</b>	Protein A/G affinity
<b>UniProt</b>	Q8IXJ6
<b>Localization</b>	Cytoplasm
<b>Applications</b>	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml
<b>Limitations</b>	This Sirtuin 2 antibody is available for research use only.



Immunofluorescent staining of PFA-fixed human HeLa cells using Sirtuin 2 antibody (green, clone PCRP-SIRT2-1A8) and phalloidin (red).

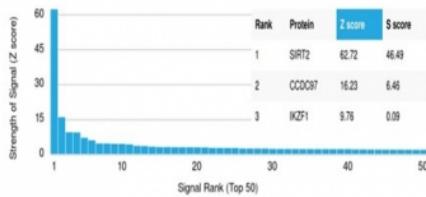


Immunofluorescent staining of PFA-fixed U-87 cells using Sirtuin 2 antibody (green, clone PCRP-SIRT2-1A8) and phalloidin (red).

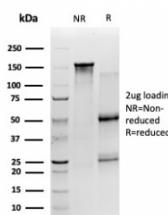


FACS staining of PFA-fixed human MCF-7 cells with Sirtuin 2 antibody (blue, clone PCRP-SIRT2-1A8), and unstained cells (red).

#### Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Sirtuin 2 antibody (clone PCRP-SIRT2-1A8). These results demonstrate the foremost specificity of the PCRP-SIRT2-1A8 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Sirtuin 2 antibody (clone PCRP-SIRT2-1A8) as confirmation of integrity and purity.

## Description

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 a 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. SIRT proteins may function via mono-ADP-ribosylation of proteins. SIRT2 contains a 323 amino acid catalytic core domain with a NAD-binding domain and a large groove which is the likely site of catalysis.

## Application Notes

Optimal dilution of the Sirtuin 2 antibody should be determined by the researcher.

## Immunogen

Recombinant full-length human SIRT2/Sirtuin 2 protein was used as the immunogen for the Sirtuin 2 antibody.

## **Storage**

Aliquot the Sirtuin 2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.