## PRDX6 Conjugated Antibody

Catalog No: #C49475

Signalway Antibody

Package Size: #C49475-AF350 100ul #C49475-AF405 100ul #C49475-AF488 100ul

#C49475-AF555 100ul #C49475-AF594 100ul #C49475-AF647 100ul

#C49475-AF680 100ul #C49475-AF750 100ul #C49475-Biotin 100ul

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Product Name	PRDX6 Conjugated Antibody
Host Species	Rabbit
Clonality	Monoclonal
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	1 Cys antibody 1 Cys peroxiredoxin antibody 1 Cys PRX antibody 1 cysPrx antibody 1-Cys peroxiredoxin
	antibody 1-Cys PRX antibody 24 kDa protein antibody 9430088D19Rik antibody AA690119 antibody Acidic
	calcium independent phospholipase A2 antibody Acidic calcium-independent phospholipase A2 antibody
	aiPLA2 antibody Antioxidant protein 2 antibody AOP2 antibody Aop2 rs3 antibody Brp 12 antibody Ciliary boo
	glutathione peroxidase antibody CP 3 antibody EC 1.11.1.15 antibody EC 1.11.1.7 antibody EC 3.1.1.
	antibody Epididymis secretory sperm binding protein Li 128m antibody GPx antibody HEL S 128m antibody
	KIAA0106 antibody Liver 2D page spot 40 antibody Ltw4 antibody Lvtw 4 antibody MGC46173 antibody
	mKIAA0106 antibody Non selenium glutathione peroxidase antibody Non-selenium glutathione peroxidase
	antibody NSGPx antibody ORF06 antibody OTTHUMP00000032693 antibody p29 antibody Peroxiredoxin-6
	antibody Peroxiredoxin6 antibody PHGPx antibody Phospholipase A2 lysosomal antibody PLA2 antibody
	PRDX 6 antibody Prdx5 antibody PRDX6 antibody Prdx6 rs3 antibody PRDX6_HUMAN antibody PRX
	antibody Red blood cells page spot 12 antibody Thiol specific antioxidant protein antibody
Accession No.	Swiss-Prot#:P30041
Uniprot	P30041
GeneID	9588;
Excitation Emission	AF350: 346nm/442nm
	AF405: 401nm/421nm
	AF488: 493nm/519nm
	AF555: 555nm/565nm
	AF594: 591nm/614nm
	AF647: 651nm/667nm
	AF680: 679nm/702nm
	AF750: 749nm/775nm
Calculated MW	25 kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250
AF405 conjugated: most applications: 1: 50 - 1: 250
AF488 conjugated: most applications: 1: 50 - 1: 250
AF555 conjugated: most applications: 1: 50 - 1: 250
AF594 conjugated: most applications: 1: 50 - 1: 250
AF647 conjugated: most applications: 1: 50 - 1: 250
AF680 conjugated: most applications: 1: 50 - 1: 250
AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Background

The peroxiredoxin (PRX) family comprises six antioxidant proteins, PRX I, II, III, IV, V and VI, which protect cells from reactive oxygen species (ROS) by preventing the metal-catalyzed oxidation of enzymes. The PRX proteins primarily utilize thioredoxin as the electron donor for antioxidation, although they are fairly promiscuous with regard to the hydroperoxide substrate. In addition to protection from ROS, peroxiredoxins are also involved in cell proliferation, differentiation and gene expression. PRX I, II, IV and VI show diffuse cytoplasmic localization, while PRX III and V exhibit distinct mitochondrial localization. The human PRX I gene encodes a protein that is expressed in several tissues, including liver, kidney, testis, lung and nervous system. PRX II is expressed in testis, while PRX III shows expression in lung. PRX I, II and III are overexpressed in breast cancer and may be involved in its development or progression. Upregulated protein levels of PRX I and II in Alzheimer's disease (AD) and Down syndrome (DS) indicate the involvement of PRX I and II in their pathogenesis. The human PRX IV gene is abundantly expressed in many tissues. PRX IV exists as a precursor protein, which is only detected in testis, and a processed secreted form. PRX V also exists as two forms, designated long and short. Like PRX IV, the long form of PRX V is highly expressed in testis. The short form of PRX V is more widely expressed, with high expression in liver, kidney, heart and lung. PRX VI, a 1-Cys peroxiredoxin (also known as antioxidant protein 2 or AOP2), is highly expressed in most tissues, particularly in epithelial cells. Localized to the cell cytosol, PRX VI functions independently of other peroxiredoxins and antioxidant proteins, specializing in antioxidant defense, lung phospholipid metabolism and protection of keratinocytes from cell death induced by reactive oxygen species.

Note: This product is for in vitro research use only