Glutathione Peroxidase 1 Conjugated Antibody

Catalog No: #C48490

Package Size: #C48490-AF350 100ul #C48490-AF405 100ul #C48490-AF488 100ul #C48490-AF555 100ul #C48490-AF594 100ul #C48490-AF647 100ul #C48490-AF680 100ul #C48490-AF750 100ul #C48490-Biotin 100ul

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Description

Product Name	Glutathione Peroxidase 1 Conjugated Antibody
Host Species	Mouse
Clonality	Monoclonal
Species Reactivity	Hu
Immunogen Description	recombinant protein
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	AL033363 antibody Cellular glutathione peroxidase antibody Glutathione peroxidase 1 antibody Glutathione peroxidase antibody GPx 1 antibody GPx-1 antibody GPX1 antibody GPX1_HUMAN antibody GPXD antibody GSHPx-1 antibody GSHPX1 antibody MGC14399 antibody MGC88245 antibody
Accession No.	Swiss-Prot#:P07203
Uniprot	P07203
GeneID	2876;
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	22 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

GPX1 is ubiquitously expressed in many tissues, where it protects cells from oxidative stress. Within cells, it localizes to the cytoplasm and mitochondria. As a glutathione peroxidase, GPx1 functions in the detoxification of hydrogen peroxide, specifically by catalyzing the reduction of hydrogen peroxide to water. The glutathione peroxidase also catalyzes the reduction of other organic hydroperoxides, such as lipid peroxides, to the corresponding alcohols. GPx1 typically uses glutathione (GSH) as the reductant, but when glutathione synthetase (GSS) is, as in brain mitochondria, γ-glutamylcysteine can serve as the reductant instead. The protein encoded by this gene protects from CD95-induced apoptosis in cultured breast cancer cells and inhibits 5-lipoxygenase in blood cells, and its overexpression delays endothelial cell death and increases resistance to toxic challenges, especially oxidative stress. This protein is one of only a few proteins known in higher vertebrates to contain selenocysteine, which occurs at the active site of glutathione peroxidase and is coded by the nonsense (stop) codon TGA.

Note: This product is for in vitro research use only