

Mouse GPX4/MCSP Monoclonal Antibody | anti-GPX4 antibody

GPX4/MCSP

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA214995	Mouse	Human, Mouse, Rat	Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

GPX4/MCSP; Monoclonal Antibody; Glutathione Peroxidase 4 (GPX4); Melanoma-associated Chondroitin Sulfate Proteoglycan (MCSP); Phospholipid hydroperoxidase (PHGPx); Sperm nucleus glutathione peroxidase (snGPx); anti-GPX4 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	LHM 2
Specificity	Glutathione Peroxidase 4 (GPX4) stabilizes cell-substratum interactions during early events of melanoma cell spreading on endothelial basement membranes. NG2 may facilitate primary melanoma progression by enhancing the activation of key signaling pathways important for tumor invasion and growth. Threonine 2256 phosphorylation of rat NG2 (threonine 2252 phosphorylation of human NG2) leads to redistribution of NG2 on the surface of astrocytomas, polarization of the cell and a significant increase in cell motility. NG2 acts as a co-receptor for spreading and focal contact formation in association with 1 integrin in malignant melanoma cells. NG2 is present on blood vessels throughout the rat embryo. Microvessels within the rat CNS express NG2 on endothelial cells, and outside the CNS, NG2 is present on smooth muscle cells. NG2 is a novel marker for epidermal stem cells that contributes to their patterned distribution by promoting stem cell clustering.
Form/Format	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.
Sequence Length	197
Applicable Applications for anti-GPX4 antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA
Positive Control	MCF7 or HepG2 cells. Human brain or malignant melanoma.
Immunogen	A 375P cells crude extract
Cellular Localization	Mitochondrion. Cytoplasm.
Hu-chromosome Location	19p13.3
Preparation and Storage	Antibody without azide: store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



SDS-PAGE
SDS-PAGE Analysis Purified GPX4/MCSP Mouse Monoclonal Antibody (LHM 2).
Confirmation of Purity and Integrity of Antibody.



IF (Immunofluorescence)
Confocal immunofluorescence image of HepG2 cells stained with GPX4/MCSP Mouse Monoclonal Antibody (LHM 2) followed by Goat anti-Mouse CF488 (green). Reddot is used to label the nuclei red.

ADDITIONAL INFORMATION

References	Kupsch, J.M., et al. 1995. Melanoma Res. 5: 403-411.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	172045844
NCBI GeneID	2879
UniProt Accession #	P36969
Molecular Weight	21kDa
NCBI Official Full Name	Phospholipid hydroperoxide glutathione peroxidase
NCBI Official Synonym Full Names	glutathione peroxidase 4
NCBI Official Symbol	GPX4
NCBI Official Synonym Symbols	MCSP; SMDS; GPx-4; PHGPx; snGPx; GSHPx-4; snPHGPx
NCBI Protein Information	phospholipid hydroperoxide glutathione peroxidase
UniProt Protein Name	Phospholipid hydroperoxide glutathione peroxidase, mitochondrial
UniProt Gene Name	GPX4
UniProt Synonym Gene Names	PHGPx; GPx-4; GSHPx-4
UniProt Entry Name	GPX4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.