

For Research Use Only

Peroxiredoxin 2 Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 86599-1-PBS

Basic Information

Catalog Number:	86599-1-PBS	GenBank Accession Number:	BC003022	Purification Method:	Protein A purification
Source:	Rabbit	GeneID (NCBI):	7001	CloneNo.:	251494D3
Isotype:	IgG	UNIPROT ID:	P32119		
Immunogen Catalog Number:	AG0835	Full Name:	peroxiredoxin 2		
		Calculated MW:	22 kDa		
		Observed MW:	22 kDa		

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA

Species Specificity:
human, mouse, rat

Background Information

Peroxiredoxin 2 (PRDX2), also named as TSA, PRP, NKEFB and TDPX1, belongs to the ahpC/TSA family. It is known to act as an antioxidant enzyme whose main function is H₂O₂ reduction in cells. PRDX2 is involved in redox regulation of the cell. It reduces peroxides with reducing equivalents provided through the thioredoxin system. It may play an important role in eliminating peroxides generated during metabolism. PRDX2 might participate in the signaling cascades of growth factors and tumor necrosis factor- α by regulating the intracellular concentrations of H₂O₂. PRDX2 actions may be related to the expression of NF κ B and I κ B.(PMID:21248284)

Storage

Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS only, pH7.3

For technical support and original validation data for this product please contact:

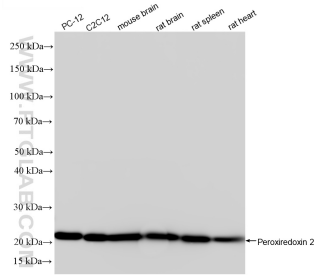
T: 4006900926

E: Proteintech-CN@ptglab.com

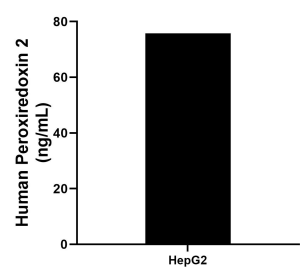
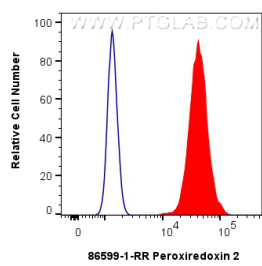
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

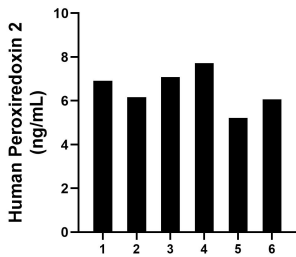
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 86599-1-RR (Peroxiredoxin 2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86599-1-PBS in a different storage buffer formulation.

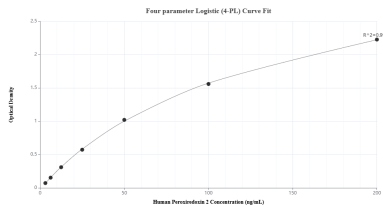


The mean Peroxiredoxin 2 concentration was determined to be 75.74 ng/mL in HepG2 cell extract based on a 1.2 mg/mL extract load.

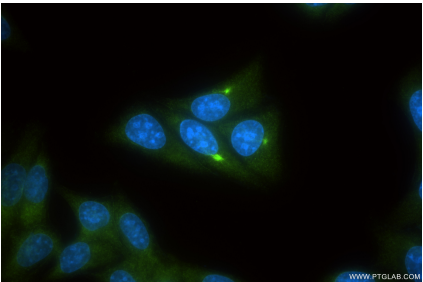


Plasma of six individual healthy human donors was measured. The human Peroxiredoxin 2 concentration of detected samples was determined to be 6.52 ng/mL with a range of 5.21 - 7.71 ng/mL

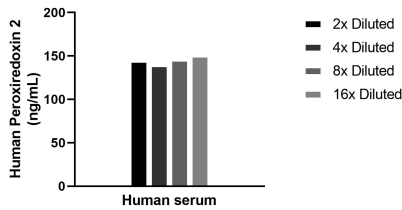
1x10⁶ C2C12 cells were intracellularly stained with 0.25 ug Peroxiredoxin 2 Recombinant monoclonal antibody (86599-1-RR, Clone:251494D3) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019). This data was developed using the same antibody clone with 86599-1-PBS in a different storage



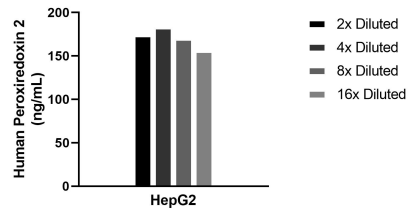
Sandwich ELISA standard curve of MP02542-2, Human Peroxiredoxin 2 Recombinant Matched Antibody Pair - PBS only. 86599-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag0835. 86599-1-PBS was HRP conjugated as the detection antibody. Range: 3.13-200 ng/mL



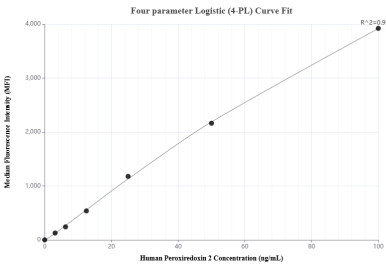
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Peroxiredoxin 2 antibody (86599-1-RR, Clone: 251494D3) at dilution of 1:600 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 86599-1-PBS in a different storage buffer formulation.



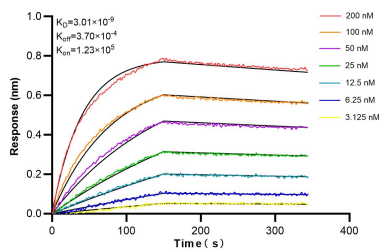
The mean Peroxiredoxin 2 concentration was determined to be 144.8 ng/mL in human serum.



The mean Peroxiredoxin 2 concentration was determined to be 170.3 ng/mL in HepG2 cell extract based on a 1.2 mg/mL extract load.



Cytometric bead array standard curve of MP02542-1, Peroxiredoxin 2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 86599-2-PBS. Detection antibody: 86599-1-PBS. Standard: Ag0835. Range: 3.125-100 ng/mL



Biolayer interferometry (BLI) kinetic assays of 86599-1-RR against Human Peroxiredoxin 2 were performed. The affinity constant is 3.01 nM.