

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
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 7001	CloneNo.: 251494D3
Source: Rabbit	UNIPROT ID: P32119	
Isotype: IgG	Full Name: peroxiredoxin 2	
Immunogen Catalog Number: AG0835	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

Product Information

86599-1-PBS targets Peroxiredoxin 2 as part of a matched antibody pair:

MP02542-1: 86599-2-PBS capture and 86599-1-PBS detection (validated in Cytometric bead array)

MP02542-2: 86599-3-PBS capture and 86599-1-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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-alpha by regulating the intracellular concentrations of H₂O₂. PRDX2 actions may be related to the expression of NFKB and IKB. (PMID:21248284)

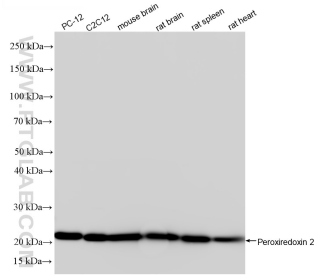
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

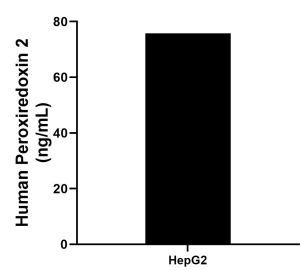
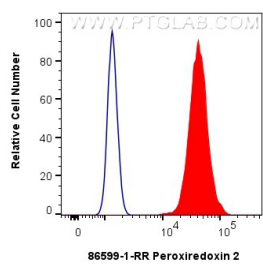
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

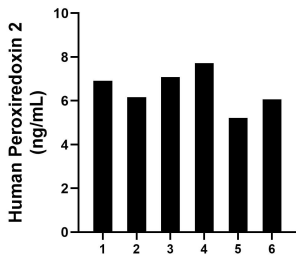
Selected Validation Data



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.

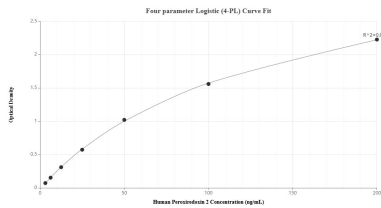


The mean Peroxiredoxin 2 concentration was determined to be 75.74 ng/mL in HepG2 cell extract based on a 1.2 mg/mL extract load.

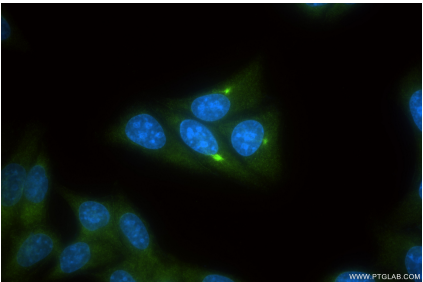


Plasma of six individual healthy human donors was measured. The human Peroxiredoxin 2 concentration of detected samples was determined to be 6.52 ng/mL with a range of 5.21 - 7.71 ng/mL

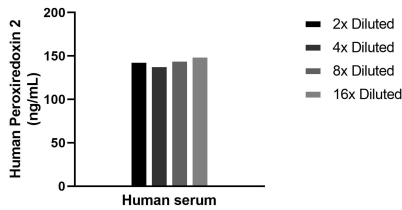
1x10⁶ C2C12 cells were intracellularly stained with 0.25 ug Peroxiredoxin 2 Recombinant monoclonal antibody (86599-1-RR, Clone:251494D3) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Intracellular Flow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



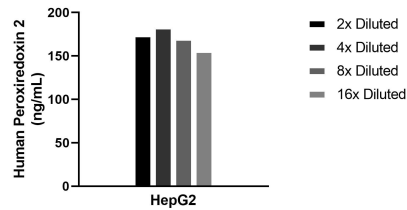
Sandwich ELISA standard curve of MP02542-2, Human Peroxiredoxin 2 Recombinant Matched Antibody Pair - PBS only. 86599-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag0835. 86599-1-PBS was HRP conjugated as the detection antibody. Range: 3.13-200 ng/mL



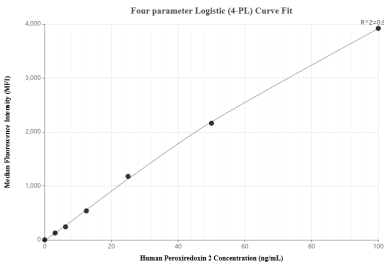
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Peroxiredoxin 2 antibody (86599-1-RR, Clone: 251494D3) at dilution of 1:600 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 86599-1-PBS in a different storage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



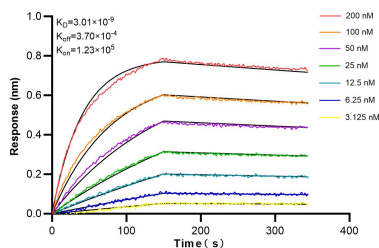
The mean Peroxiredoxin 2 concentration was determined to be 144.8 ng/mL in human serum.



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.