

NQO1 Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 86693-2-PBS

Basic Information

Catalog Number: 86693-2-PBS	GenBank Accession Number: BC007659	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 1728	CloneNo.: 251713C3
Source: Rabbit	UNIPROT ID: P15559	
Isotype: IgG	Full Name: NAD(P)H dehydrogenase, quinone 1	
Immunogen Catalog Number: AG2009	Calculated MW: 274 aa, 31 kDa	
	Observed MW: 31 kDa	

Applications

Tested Applications:
WB, Sandwich ELISA, Indirect ELISA

Species Specificity:
human, mouse, rat

Product Information

86693-2-PBS targets NQO1 as part of a matched antibody pair:

MP02801-1: 86693-1-PBS capture and 86693-2-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

NQO1, also named as DIA4, NMOR1, DTD and QR1, belongs to the NAD(P)H dehydrogenase (quinone) family. This enzyme apparently serves as a quinone reductase in connection with conjugation reactions of hydroquinones involved in detoxification pathways as well as in biosynthetic processes such as the vitamin K-dependent gamma-carboxylation of glutamate residues in prothrombin synthesis. It is known to be involved in benzene metabolism. In human studies of ozone exposure, polymorphisms in oxidative stress genes (NQO1, GSTM1, GSTP1) modify respiratory symptoms, lung function, biomarkers and risk of asthma. (PMID:18511640, PMID:18848868)

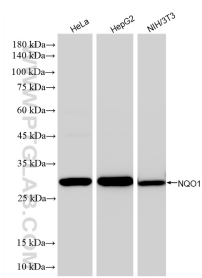
Storage

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

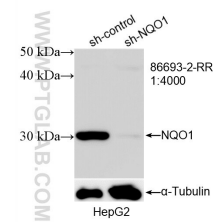
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

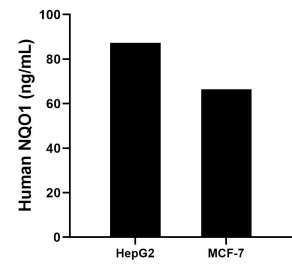
Selected Validation Data



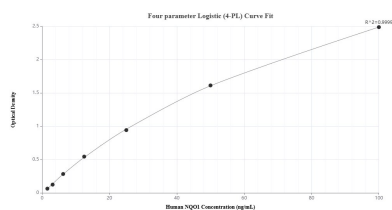
Various lysates were subjected to SDS PAGE followed by western blot with 86693-2-RR (NQO1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86693-2-PBS in a different storage buffer formulation.



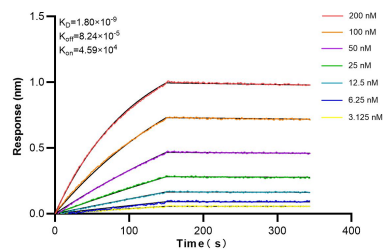
WB result of NQO1 antibody (86693-2-RR; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NQO1 transfected HepG2 cells. This data was developed using the same antibody clone with 86693-2-PBS in a different storage buffer formulation.



The mean NQO1 concentration was determined to be 87.24 ng/mL in HepG2 cell extract based on a 1.2 mg/mL extract load and 66.51 ng/mL in MCF-7 cell extract based on a 1.2 mg/mL extract load.



Sandwich ELISA standard curve of MP02801-1, Human NQO1 Recombinant Matched Antibody Pair - PBS only. 86693-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag2009. 86693-2-PBS was HRP conjugated as the detection antibody. Range: 1.56-100 ng/mL



Biolayer interferometry (BLI) kinetic assays of 86693-2-RR against Human NQO1 were performed. The affinity constant is 1.80 nM.