

ARG82038 Human Peroxiredoxin 2 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82038-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82038-002	Standard	2 X 20 ng/vial	4°C
ARG82038-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82038-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82038-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82038-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82038-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82038-008	25X Wash buffer	20 ml	4°C
ARG82038-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82038-010	STOP solution	10 ml (Ready to use)	4°C
ARG82038-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82038 Human Peroxiredoxin 2 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Peroxiredoxin 2 in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	Cross Reactivity: Human Recombinant Peroxiredoxin 1: 0.2% Human Recombinant Peroxiredoxin 3: 5.1% Human Recombinant Peroxiredoxin 4: 19.8% Human Recombinant Peroxiredoxin 5: 0.3%
Target Name	Peroxiredoxin 2
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	156 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.

Standard Range	312 - 20000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.6%; Inter-Assay CV: 6.6%
Alternate Names	EC 1.11.1.15; TPX1; TDPX1; HEL-S-2a; PTX1; Thiol-specific antioxidant protein; PRX2; TSA; Peroxiredoxin-2; PRP; Thioredoxin-dependent peroxide reductase 1; NKEF-B; NKEFB; Natural killer cell-enhancing factor B; Thioredoxin peroxidase 1; PRXII

Application Instructions

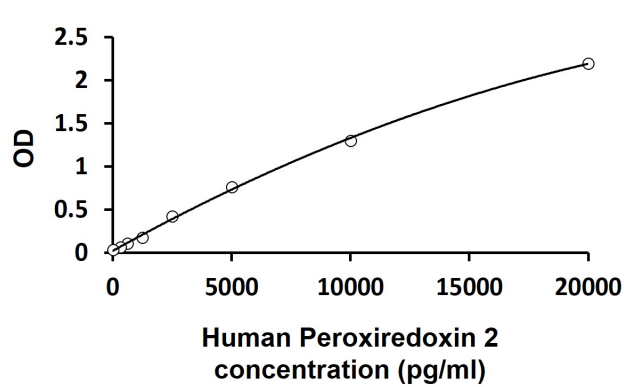
Assay Time	~ 5 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PRDX2
Gene Full Name	peroxiredoxin 2
Background	This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein plays an antioxidant protective role in cells, and it may contribute to the antiviral activity of CD8(+) T-cells. The crystal structure of this protein has been resolved to 2.7 angstroms. This protein prevents hemolytic anemia from oxidative stress by stabilizing hemoglobin, thus making this gene a therapeutic target for patients with hemolytic anemia. This protein may have a proliferative effect and play a role in cancer development or progression. Related pseudogenes have been identified on chromosomes 5, 6, 10 and 13. [provided by RefSeq, Mar 2013]
Function	Involved in redox regulation of the cell. Reduces peroxides with reducing equivalents provided through the thioredoxin system. It is not able to receive electrons from glutaredoxin. May play an important role in eliminating peroxides generated during metabolism. Might participate in the signaling cascades of growth factors and tumor necrosis factor-alpha by regulating the intracellular concentrations of H(2)O(2). [UniProt]
Highlight	Related products: Peroxiredoxin antibodies ; Peroxiredoxin ELISA Kits ; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
Cellular Localization	Cytoplasm. [UniProt]



ARG82038 Human Peroxiredoxin 2 ELISA Kit standard curve image

ARG82038 Human Peroxiredoxin 2 ELISA Kit results of a typical standard run with optical density reading at 450 nm.