

Human 2,3-DPG (2,3-Diphosphoglycerate) ELISA Kit | 2,3-DPG elisa kit

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CATALOG #
AAA277217

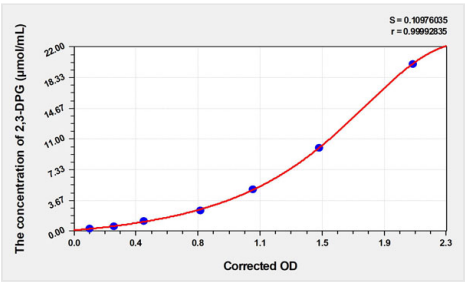
REACTIVITY
Human

PRODUCT SYNONYMS

2; 3-DPG (2; 3-Diphosphoglycerate); Human 2; 3-Diphosphoglycerate) ELISA Kit; 3DPG; 3-DPG elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Assay Type	Sandwich
Samples	Serum, plasma, tissue homogenates, cell lysates and other biological fluids
Detection Range	0.32-20umol/mL
Sensitivity	0.14umol/mL
Standard	20umol/mL
Assay Length	3.5h
Precision	Intra-assay Precision (Precision within an assay): CV%<8% Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision. Inter-assay Precision (Precision between assays): CV%<10% Three samples of known concentration were tested in forty separate assays to assess inter-assay precision.
Test Principle	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to 2,3-Diphosphoglycerate (2,3-DPG). Standards or samples are added to the appropriate microtiter plate wells then with a biotin-conjugated antibody specific to 2,3-Diphosphoglycerate (2,3-DPG). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain 2,3-Diphosphoglycerate (2,3-DPG), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 10 nm. The concentration of 2,3-Diphosphoglycerate (2,3-DPG) in the samples is then determined by comparing the OD of the samples to the standard curve.
Standard Curve	Matrices listed below were spiked with certain level of recombinant 2,3-DPG and the recovery rates were calculated by comparing the measured value to the expected amount of 2,3-DPG in samples. Matrix Recovery rangeAverageserum (n=5)90-105%97EDTA plasma (n=5)80-92%86Heparin plasma (n=5)88-102%95
Recovery Rate	The linearity of the kit was assayed by testing samples spiked with appropriate concentration of 2,3-DPG and their serial dilutions. The results were demonstrated by the percentage of calculated concentration to the expected. Matrix1:21:41:81:16serum (n=5)85-97%90-99%82-101%93-105%EDTA plasma (n=5)85-97%87-96%82-95%92-105%Heparin plasma (n=5)87-96%92-105%89-102%92-101%



Standard Curve (Sample)

ADDITIONAL INFORMATION

Product Categories/Family for 2,3-DPG elisa kit Metabolic pathway

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.

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Online datasheet: <https://www.aaabiotech.com/human-elisa-kits/23-dpg-23-diphosphoglycerate/277217>