

Pentosan Polysulfate (PPS) ELISA Kit

Catalog No K1126

Tool for Bio-equivalence studies of a Pentosan Polysulfate formulation

Pentosan Polysulfate (PPS) is an approved medication for Interstitial Cystitis, more commonly known as painful bladder syndrome. There has been increased clinical attention of this drug as multiple research reports indicate its role in tumor growth inhibition, as an anti-HIV agent, as inhibitor of atherosclerosis and for the treatment of osteoarthritis. This ELISA kit can sensitively detect PPS in human plasma and urine samples.

Assay Principle

This assay uses an indirect ELISA format in which the primary reagent is the rabbit polyclonal antibody against PPS developed by Abexome Biosciences. Matrix containing the analyte i.e. PPS is coated on microtiter plates pre-coated with PLL. The bound PPS is then detected by adding PPS polyclonal antibody followed by detection with anti-rabbit IgG peroxidase conjugate/TMB substrate. The signal produced is measured at 450 nm in a microtiter plate reader. Key steps of the assay and approximate time taken for each step are outlined below.

Sl No	Step	Time Taken
1	Analyte Coating and incubation	2.5 hr
2	Blocking	1 hr
3	Primary Antibody Binding	1.5 hr
4	Detection Antibody Binding	1.5 hr
5	Substrate Addition and Measurement	45 min
6	Calculation of Results	15 min

Performance Summary

A complete validation exercise was done in human plasma matrix following industry guidelines on ligand binding assays. Key performance characteristics of the assay are:

Sl No	Parameter	Observed Value	Remarks
1	Sensitivity/LLOQ	2.6 ng/ml	Determined by the criteria that %AR is within 75-125% range at LLOQ

Sl No	Parameter	Observed Value	Remarks
2	Assay Range	2.6 – 166.5 ng/ml	Determined by the criteria that %AR is within 80-120% for the calibrator standard within the assay range except at LLOQ where it is within 75-125%
3	Precision (intra-assay)	< 20%	Determined by %CV for all QC samples
4	Precision (inter-assay)	<16%	Determined by %CV for all QC samples
5	Accuracy (intra-assay)	within 80-120%	Determined by %AR for all QC samples
6	Accuracy (inter-assay)	Within 80-120%	Determined by %AR for all QC samples

Kit Components

Items supplied with the kit:

1. PPS Standard
2. Anti-PPS Antibody
3. Anti-PPS Detection Antibody
4. Blocking Reagent
5. TMB Substrate
6. Pre-coated microtiter plate (96-well)

Items to be supplied by end-user:

1. Assay matrix: Human plasma
2. Common Buffers: 1X PBS, 1X PBST, Sterile Distilled Water
3. Reagents: Tween-20 (AR Grade), 2N Sulphuric Acid
4. Labware: Pipettes, Powder-free gloves
5. Instruments: Microtiter plate Orbital Shaker, Microtiter plate Reader (ELISA reader) with 450 nm filter

Please refer the kit instruction manual available at <http://www.abexome.com/products/1126/> for further details

Ordering Information

Catalog No	Item	Pack Size
K1126	Pentosan Polysulfate (PPS) ELISA Kit	1 x 96 well

Email your orders to info@abexome.com