

AIA-PACK Series
Kidney Markers



Trust in Tosoh for Kidney Care

It is estimated that 30 million people in the United States have Chronic Kidney Disease (CKD). Diabetes and High Blood Pressure are the most common causes of CKD, with both medical conditions rising at double digit rates. Almost half (48%) of those individuals with severely reduced kidney function are not even aware that they have CKD.¹ Some of the negative outcomes of CKD may be averted with early diagnosis and treatment. Traditional methods of measuring level of kidney function and stage of kidney disease include GFR (glomerular filtration rate based on creatinine rate) and albumin.

Cystatin C

By incorporating testing of Cystatin C to assess the level of kidney dysfunction in patients, physicians can identify patients with CKD early and intervene with treatment. Cystatin C, a small protein produced by all nucleated cells in the body, is produced throughout the body at a constant rate, and remains steady in the blood when the kidneys are functioning efficiently and the GFR is normal. Cystatin C is unaffected by age, body mass, race and gender; and is more sensitive to changes of kidney dysfunction.² When Cystatin C increases, it corresponds to a decreased GFR and kidney dysfunction. Studies have shown that in patients with AKI (Acute Kidney injury), Cystatin C will show abnormal levels whereas over 50% of Serum Creatinine will still be normal.³

KIDNEY HEALTH MARKERS AVAILABLE

Vit D

iPTH

Cystatin C

Ferritin

BMG

TOSOH BIOSCIENCE

www.tosohbioscience.us



Universal Reagent

Tosoh's AIA-PACK test cup format works with every Tosoh automated immunoassay system allowing for a seamless transition from one system to the other, ensuring consistent results in an efficient and economical process.

Save Time and Money

Tosoh's AIA-PACK test cups are single, unitized cups that use a dry reagent format that ensures calibration stability of up to 90 days.

No Contamination, More Traceability

Because there is no transfer of reagents the risk of contamination is eliminated. The unique bichromatic fluorescence kinetic measurement ensures a high analytical and functional sensitivity for all assays. AIA-PACK test cups and trays are labelled with the assay code and lot number for automated scheduling and inventory.

Tests for CKD	Why Test?	When to Test	Tosoh AIA-PACK assay
iPTH	Risk of secondary hyperparathyroidism During surgery for partial removal of parathyroid gland	Test each year At baseline and during procedure until 50% decline ⁴	Unique epitope design reduces risk of false positives Results available in 18 minutes
Vit D	Kidneys synthesize active form of Vit D	Patients with Stage I to III CKD should be tested and supplemented with Vit D ⁵	Equimolar design for D2 and D3 accurately assesses Vit D deficiency
Ferritin	Patients undergoing dialysis are at risk of iron deficiency anemia. Ferritin serves as an indirect marker of iron stores.	Test regularly until hemoglobin target is achieved and then every three months if hemoglobin is stable. ⁶	Proprietary dry reagents provide 90-day calibration and minimize waste.
Cystatin C	To assess kidney function and GFR. Not affected by age, body weight, race and gender	During routine physical exams when creatinine and albumin are ordered	

Choose Wisely. Choose Tosoh.



Accurate & precise



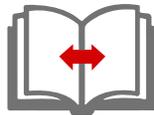
Specific & sensitive



Correlation with gold standard methods



Biotin-free immunoassays



Extensive test menu



Up to 90 day calibration stability



10 min incubation times



Automated workflows

Available for Labs and Workloads of All Sizes



AIA-360



AIA-900
Benchtop



AIA-900
with 9 Tray Sorter
Also available with 19 tray sorter option and as Loader model



AIA-2000

Tosoh products are for Prescription use only as In-Vitro Diagnostics



Tosoh Bioscience, Inc.
6000 Shoreline Court, Suite 101
South San Francisco, CA 94080
Tel: (800) 248-6764
Fax: (650) 615-0415
www.tosohbioscience.us

References:

- <https://www.kidneynews.org/careers/leading-edge/cdc-releases-2017-national-ckd-fact-sheet>
- Laterza, Omar F, et al "Cystatin C: An Improved Estimator of Glomerular Filtration Rate? Clin Chem 48:5 699-707 (2002)
- Murty M.S.N., et al "Serum cystatin C as a marker of renal function in detection of early acute kidney injury" Indian J Nephrol 2013 May-June(3):180-183.
- http://endocrinediseases.org/parathyroid/surgery_pt_h_monitoring.shtml
- Kennel K, et al "Vitamin D Deficiency in Adults: When to Test and How to Treat" Mayo Clin Proc. 2010 Aug; 85 (8): 752-758
- Stauffer ME, Fan T. Prevalence of anemia in chronic kidney disease in the United States. PLoS One 2014;9(1):e84943