



BIOMÉRIEUX

VIDAS[®] PARATHYROID HORMONE (1-84) 3rd generation precision



PIONEERING DIAGNOSTICS

Did you know?

Parathyroid Hormone (PTH)

- Main hormone involved in calcium and phosphorus homeostasis
- PTH (1-84) = the biologically active form
Half-life ≤ 4 minutes in the bloodstream
- Rapidly degraded by the liver into non-(1-84) C-terminal fragments with longer half-lives, essentially (7-84) and (53-84), eliminated by the kidneys

Key characteristics of 3rd generation PTH assays:

- Recognize **only PTH (1-84)**
- No cross-reaction with other non-active fragments
- Correlated with WHO* International Standard Parathyroid Hormone 1-84, recombinant, coded 95/646

*WHO: World Health Organization

Why choose a 3rd generation PTH assay?



WHO* recommends the use of the International Standard PTH 1-84, recombinant (95/646)¹



Clinicians recognize the analytical value of 3rd generation test specificity, particularly for dialysis patients²



Labs rely on a single standardized technique for various clinical applications

Better standardization between 3rd generation PTH tests

More accurate results for better patient management

Increased lab efficiency

How can 3rd generation diagnostic accuracy help CKD patients?

In chronic kidney disease (CKD) patients, bone and mineral disorders worsen as the disease progresses.

International KDIGO guidelines recommend:

- Regular **PTH and Vitamin D measurement** to monitor calcium homeostasis and adapt treatment.³
- PTH concentration of dialysis patients maintained **within 2 and 9 times the upper normal limit** of the assay.

When the kidneys fail to function the C-terminal fragments of PTH accumulate in the circulation, acting as an important confounder.

Using **3rd generation PTH assays** rather than 2nd generation to detect only the active parathyroid hormone is therefore **essential to provide greater specificity for more accurate follow-up of CKD patients.**



CLINICAL APPLICATIONS

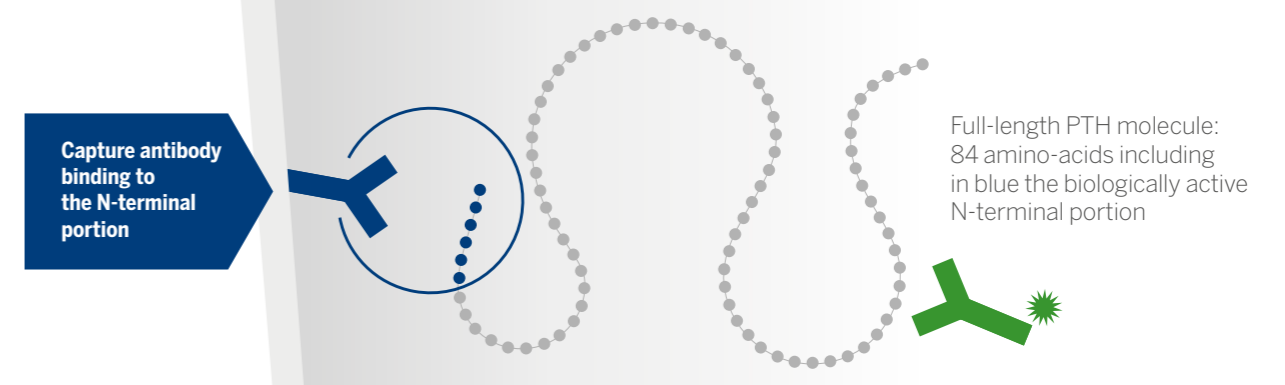
- Aid to diagnosis of hyperparathyroidism or hypoparathyroidism
- Aid for the monitoring of calcium homeostasis in patients with chronic kidney disease (CKD)

VIDAS[®] PTH (1-84)

3rd generation precision

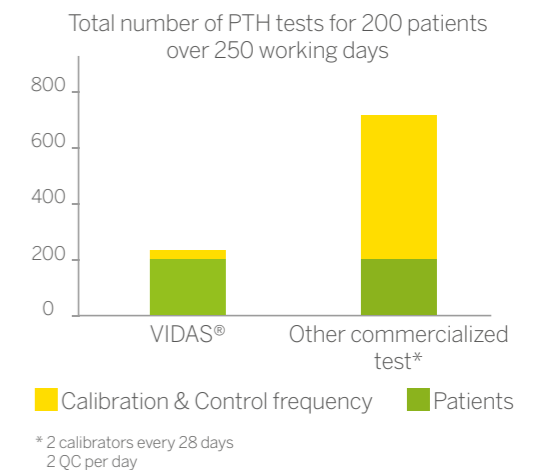
Choose accuracy & cost-effectiveness

VIDAS[®] PTH (1-84) test format



Sandwich enzyme immunoassay method with capture of the N-Terminal portion and detection of the C-terminal portion.

- Specific of the biologically active PTH form
- Directly correlated with International Standard WHO 95/646
- Easy in-house testing: Your quality, Your way
- Reduced cost per patient:
 - **84-day calibration**
 - Calibrator and control included in the kit
 - On-demand testing adapted to small/medium volumes
- No observed biotin interference (tested up to 2,000 ng/mL)



Your VIDAS[®] Platform: Easily complete monitoring of CKD patients



**Target VIDAS[®] PTH (1-84) levels
90 - 400 pg/mL⁴**

Exact values: 89.2-401.4 in the package insert

- Perform PTH (1-84), 25 OH Vitamin D and Ferritin tests on the same analyzer
- Reliable VIDAS[®] 25 OH Vitamin D Total assay:
 - Detection of both vitamin D2 and D3
 - Good correlation with LC-MS/MS mass spectrometry⁵

AVAILABLE ON
VIDAS® INSTRUMENTS:
VIDAS®, MINI VIDAS®
AND VIDAS® 3



	VIDAS® PTH (1-84)
Reference	422010
Tests / kit	30
Time to result	24 minutes
Sample type	Serum, Plasma
Sample volume	300 µL
Calibration & Control frequency	84 days



VIDAS® Bone & Mineral Metabolism panel

	Reference
VIDAS® PTH (1-84)	422010
VIDAS® 25 OH Vitamin D Total	30463
VIDAS® Ferritin	30411

REFERENCES

1. WHO/BS/09.2115
2. Cavalier E, et al. Problems with the PTH assays. Ann Endocrinol (Paris). 2015 May;76(2):128-33.
3. Kidney Disease: Improving Global Outcomes (KDIGO) CKD-MBD Update Work Group. KDIGO 2017 Clinical Practice Guideline Update for the Diagnosis, Evaluation, Prevention, and Treatment of Chronic Kidney Disease–Mineral and Bone Disorder (CKD-MBD). Kidney Int Suppl. 2017;7:1–59.
4. See package insert.
5. Moreau E. (2013). Development of the VIDAS 25 OH Vitamin D Total Assay. IFCC – EUROLAB.