Comprehensive Menu for the Management of Bone and Mineral Related Diseases
DiaSorin offers a specialty line of Bone and Mineral assays providing accuracy and reliability in the management of Bone and Mineral related diseases.

With its fully automated line of chemiluminescent immunoassays, DiaSorin provides a unique menu of specialty assays in the Bone and Mineral field to manage patients with confidence.

The excellence in Vitamin D, expertise in PTH assays, reliability for BAP and Osteocalcin make DiaSorin the partner of choice for your Bone and Mineral testing needs.
Parathyroid Hormone

Parathyroid hormone (PTH) is produced and secreted by the parathyroid glands, which are located along the posterior aspect of the thyroid gland. Parathyroid Hormone testing is useful for:
- Diagnosis and differential diagnosis of hypercalcemia
- Diagnosis of primary, secondary and tertiary hyperparathyroidism
- Diagnosis of hypoparathyroidism
- Monitoring end-stage renal failure patients for possible renal osteodystrophy

DiaSorin PTH Tests

LIAISON® 1-84 PTH Assay: The most specific and reliable determination of parathyroid hormone levels
Used for the quantitative determination of 1-84 PTH without cross reactivity to 7-84 and other inactive fragments
Code 310630 - CLIA

- **Specific**
  - 100% specific to 1-84 PTH
  - 0% cross-reactive with 7-84 PTH and other fragments

- **Reliable**
  - Analytical Sensitivity: ≤ 1.7 pg/mL
  - Functional Sensitivity: ≤ 4.0 pg/mL
  - Wide measuring range: 4.0 - 1800 pg/mL

LIAISON® N-TACT® PTH Gen II Assay - Accurate determination of intact parathyroid hormone levels
Intended for the quantitative determination of intact human parathyroid hormone in patient samples, for differential diagnosis of hypercalcemia and hypocalcemia resulting from disorders of calcium metabolism
Code 317910 - CLIA

- **Specific**
  - Low cross-reactivity to 7-84 PTH and other inactive fragments

- **Reliable**
  - Analytical Sensitivity: ≤ 0.5 pg/mL
  - Functional Sensitivity: 3.0 pg/mL
  - Wide measuring range: 3.0 to 1900 pg/mL
  - Intra & Inter assay CV: < 5.7%
Bone Turnover Markers

Bone turnover (or remodeling) is a constant process whereby bone tissue is removed from the skeleton (resorption) and new tissue formed in its place (formation). In healthy individuals, these processes lead to the replacement of approximately 10% of the skeleton every year. It is this bone remodeling process that repairs the skeleton following fracture or damage to any bone.

If the balance between bone resorption and formation is disrupted, the rate at which each process takes place changes which may have considerable impact on remodeling of the bones, resulting in weak, brittle or deformities of affected bones. Changes in the rates at which bones are formed and resorbed can be measured by the evaluation of specific markers of bone turnover e.g. Bone Alkaline Phosphatase (BAP) and Osteocalcin which are both released by the osteoblast during the bone formation process. Measurement of these bone formation markers can assist in the diagnosis and monitoring of therapy for several skeletal conditions e.g. Osteoporosis, Pagets’ disease, Renal Osteodystrophy and Cancer metastases.

DiaSorin Bone Turnover Tests

BAP: LIAISON® BAP OSTASE®: The most accurate bone formation marker

Code 310970 - CLIA

- **Specific**
  - Highly specific monoclonal antibodies
  - Low cross-reactivity with LAP (Liver Alkaline Phosphatase) in enriched samples

- **Reliable**
  - Analytical Sensitivity: 0.1 μg/L
  - Functional Sensitivity: 1.5 μg/L
  - Wide measuring range: 0-120 μg/L

OSTEOCALCIN: LIAISON® OSTEOCALCIN: Established biomarker of bone formation and bone turnover

Code 310950 - CLIA

- **Specific**
  - Monoclonal antibodies identify intact Osteocalcin (1-49) and large fragments (1-43)

- **Reliable**
  - Normal Range: Accurate ranges for male and Pre / post menopausal female
  - Functional Sensitivity: ≤ 3.0 ng/mL
  - Wide Measuring Range: 0.5-300 ng/mL

Discover why the world’s premier experts in Bone and Mineral Assays entrust DiaSorin with their patient samples.
Vitamin D

The role of Vitamin D in regulating circulating levels of calcium and phosphorus to ensure normal bone mineralization is well known. Emerging evidence correlates insufficient levels of Vitamin D to an increased risk of developing non skeletal pathologies: cardiovascular diseases, hypertension, cancer, diabetes, multiple sclerosis, rheumatoid arthritis, infectious diseases.
1,25 Dihydroxyvitamin D plays an essential role in the efficient active absorption of calcium and phosphorus, as well as their normal metabolism.
The diverse effects of Vitamin D are mediated by receptors that regulate more than 200 genes. Maintaining sufficient Vitamin D levels is therefore key to maintain good health.

DiaSorin Vitamin D Tests

LIAISON® 25 OH Vitamin D TOTAL Assay: Measures both Vitamin D$_2$ and D$_3$ metabolites to accurately assess Vitamin D sufficiency
Code 310600 - CLIA

- **Specific**
  - High specificity for both, 25 OH Vitamin D$_2$ and D$_3$
- **Reliable**
  - Functional Sensitivity: ≤ 4.0 ng/mL
  - High correlation with LC-MS/MS
  - Wide measuring range: 4.0 ng/mL - 150 ng/mL

LIAISON® XL 1,25 Dihydroxyvitamin D assay: is an in vitro chemiluminescent immunoassay (CLIA) intended for the quantitative determination of 1,25 Dihydroxyvitamin D in serum, EDTA and Lithium Heparin plasma.
Code 310980 - CLIA

- **Specific**
  - 100% Cross-reactivity of 1,25 Dihydroxyvitamin D$_2$ and D$_3$ results
- **Reliable**
  - Functional Sensitivity: < 5 pg/mL
  - High correlation with LC-MS/MS
  - Fast: first result in 65 minutes
  - Wide measuring range: 5-200 pg/mL

_DiaSorin – The Diagnostic Specialist – has been the worldwide leader in Vitamin D testing for the past 25 years. From RIA to the first fully automated, extraction free immunoassay for the accurate detection of 1,25 Dihydroxyvitamin D, DiaSorin continues to lead the industry with advanced science and unmatched expertise._
## Ordering Information

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Code</th>
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<tbody>
<tr>
<td>*LIAISON® XL 1,25 Dihydroxyvitamin D (code 310980)</td>
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<td>*LIAISON® XL 1,25 Dihydroxyvitamin D Control Set (code 310981)</td>
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<td>*LIAISON® XL 1,25 Dihydroxyvitamin D Specimen Diluent (code 310982)</td>
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<td>LIAISON® 25-OH Vitamin D TOTAL Assay (code 310600)</td>
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<td>*LIAISON® Osteocalcin (code 310950)</td>
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*FOR OUTSIDE THE US ONLY