

Urine CartiLaps[®] ELISA

FOR RESEARCH USE ONLY

Cartilage Degradation Marker (CTX-II) For Clinical Research

Clinical Studies

- Quantitative assessment of cartilage degradation in rheumatoid arthritis and osteoarthritis
- Monitoring therapeutic effect on cartilage degradation
- Predicting disease progression in arthritis patients

The Urine CartiLaps[®] ELISA is used for quantitative assessment of cartilage degradation. The assay detects C-telopeptide fragments of collagen type II (CTX-II) generated during cartilage erosion.

X-ray by CCBR - Clinical Center for Basic Research

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Urine CartiLaps[®]
ELISA

Serum CrossLaps[®]
ELISA

ALPHA CrossLaps[®]
ELISA

RatLaps[™]
ELISA

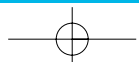
Pre-Clinical CartiLaps[®]
ELISA

N-MID[®] Osteocalcin
ELISA

CrossLaps[®] for Culture
ELISA

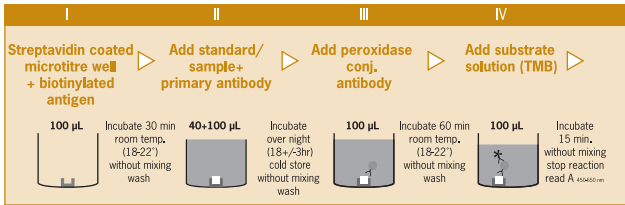
Rat-MID[™] Osteocalcin
ELISA

Urine CrossLaps[®]
ELISA



Urine CartiLaps® ELISA

ENZYME IMMUNOASSAY FOR QUANTITATIVE
ASSESSMENT OF CARTILAGE DEGRADATION



Performance Characteristics

Method:	• Competitive ELISA
Format:	• 96-well microplate with reagents sufficient to test 40 samples in duplicate
Detection limit:	• 0.3 ng/mL
Analyte:	• A sequence (EKGPDP) specific for a part of the C-terminal telopeptide α 1 chain of type II collagen (CTX-II)
Specimen:	• Urine (for serum applications, please inquire)
Specimen volume:	• 40 μ L
Precision CV intraassay:	• <6%
Precision CV interassay:	• <10%
Species reactivity:	• Human

The Urine CartiLaps® ELISA kit is for *in vitro* use only.
Product number #1CAL4000

Sampling

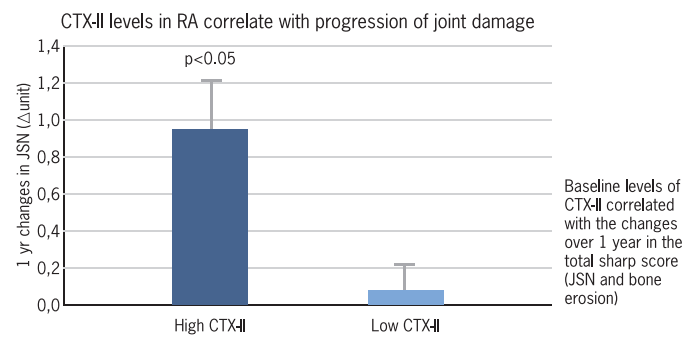
Freeze samples after collection ($\leq 20^{\circ}\text{C}$). Do not add HCl to urine samples.

Analyte Stability

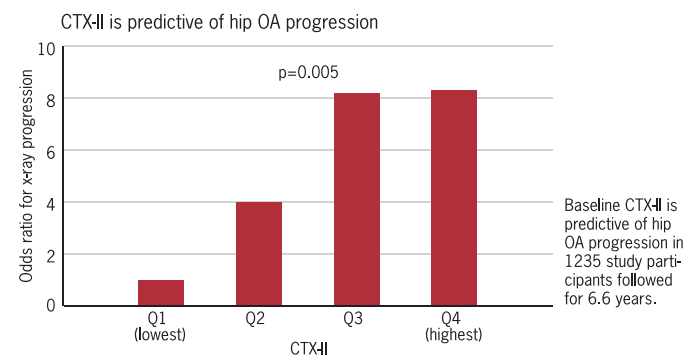
At 20°C	> 24 hours
At $\leq -20^{\circ}\text{C}$	> 1 year

Assay Procedure

1. Preincubate wells with 100 μ L **Biotinylated CartiLaps Antigen** for 30 min at room temperature ($18-22^{\circ}\text{C}$) without shaking.
2. Wash wells 5 times manually with **Washing Solution**. Make sure that wells are completely emptied after each washing cycle.
3. Add 40 μ L of **Standard** or sample per well. Then add 100 μ L of **Primary Antibody** solution. Incubate for 21 ± 3 hours at $2-8^{\circ}\text{C}$ without shaking.
4. Wash 5 times with **Washing Solution** as described in step 2.
5. Add 100 μ L per well of **Peroxidase-Conjugated Antibody**. Incubate for 60 min at room temperature without shaking.
6. Wash 5 times with **Washing Solution** as described in step 2.
7. Add 100 μ L of **Substrate Solution** per well and incubate for 15 min in the dark at room temperature without shaking.
8. Stop reaction with 100 μ L **Stopping Solution** and measure absorbance at 450 nm. Read at 650 nm as reference.



Garnero et al. *Arthritis Rheum* 46(1):21-30 (2002)



M. Reijman et al. *Arthritis Rheum* 8:2471-2478 (2004)

LITERATURE: 1. REIJMAN ET AL. *ARTHRITIS RHEUM* 50:2471-2478 (2004). 2. CHRISTGAU ET AL. *MENOPAUSE* 11:508-518 (2004). 3. GARNERO ET AL. *ARTHRITIS RHEUM* 50:3137-3144 (2004). 4. DING ET AL. *OSTEOARTHRITIS CARTILAGE* 13:198-205 (2005). 5. GARNERO ET AL. *J RHEUMATOL* 32:697-703 (2005). 6. BAGGER ET AL. *BONE* (2005). 7. MEULENBELT ET AL. *ANN RHEUM DIS* (2005). 8. LANDEWE ET AL. *ANN RHEUM DIS* (2005). 9. MANICOURT ET AL. *DRUGS R.D* 6:261-271 (2005).

all the way

FROM RESEARCH TO PATIENT MONITORING

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