MMP-3

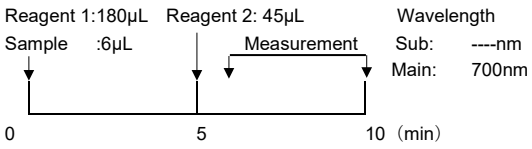
[Intended Use]
The MMP3-Bulk is an in vitro assay for the quantitative determination of MMP-3 in serum.

[Summary and explanation of the test]
Matrix metalloproteinase-3 (MMP-3) is protease that produced by the synovium cell of the articular, fiber blast cell, and macrophage. It is thought that MMP-3 is related to the articular destruction. Because MMP-3 decompose the consists of the articular cartilage that is proteoglycan, collagen, laminin, fibronectin[1].
MMP-3 production is accelerated in the synovium tissue of the Rheumatoid arthritis, so concentration of the MMP-3 is correlated with the Rheumatic activity. From these clinical data, regular measurements of MMP-3 can be useful aid in the judgement of RA curative effect.[2] MMP3 - Bulk is latex reagent for quantitative measurement of the MMP-3 that can be applied to the automatic analyzer.

[Principle of method]
When a latex reagent is made to react with a specimen, the MMP-3 in the specimen and anti-human MMP-3 antibody-sensitized latex in the reagent produce a specific antigen-antibody reaction, resulting in turbidity.
As the degree of turbidity is in proportion to the concentration of MMP-3 in a specimen, the turbidity is measured optically to determine the concentration of MMP-3 in a specimen.

[Reagent preparation]
Reagent 1 : Use Reagent 1 as supplied.
Reagent 2 : Use Reagent 2 as supplied.

[Procedure]



Temperature: 37 degree C
This is the standard procedure. Instrument applications are available upon request.

[Precautions on procedure]
(1) Specimen
  (a) Use serum as a specimen. It is recommended to measure immediately after collection.
  (b) The test is affected by EDTA.
(2) Interfering substances
  The test is little affected by Chyle, Hemolytic hemoglobin, Bilirubin・F, Bilirubin・C.

[Expected values]
Reference standard area[3]
Man : 36.9 ～ 121 ng/mL
Female : 17.3 ～ 59.7 ng/mL

[Performance characteristics]
(1) Sensitivity
  Absorbance change of a sterile saline sample is 0.01 or less.
  Absorbance change of a 800 ng/mL MMP-3 sample is 0.05 or more and 0.5 less.
(2) Specificity
  Obtained values of control serum samples with known amount of MMP-3 fall within ±15%.

(3) Precision
Within-run CV of 5 repeated assays is 10% or less.
(4) Measurable range
10～1600 ng/mL MMP-3 (In the case of using the standard procedure) .
(5) Correlation
Correlation coefficient: r= 0.994 (n=201)
Regression equation: y= 0.973x + 5.073 (y= MMP3-Bulk, x= Company A)

[Primary Standard]
In-house standard material.

[Warning and precautions]
(1) Be careful about the handling of serum, etc., which involve the risk of infection with HBV, HCV, HIV, etc.
(2) After opening the reagent, it is not recommended to store it for a long period of time. When the opened reagent is stored, cap the bottle and keep it at the specified temperature.
(3) Before determining, reagents should be mixed thoroughly.
(4) Do not use the reagents described above for any purpose other than described herein.
(5) When concentration of a sample exceeds measurement range, dilute the sample with a saline solution.
(6) Do not use mixed reagent from different lots.
(7) Some specimens may not allow correct measurement because of unspecific turbidity that occurred during measurement. If measurement results are questionable, presence or absence of unspecific turbidity should be confirmed by the time course for the reaction or by a dilution test.
(8) Use an optional MMP-3 Calibrator for the calibration. It should be used according to the manufacturer's instructions.
(9) Avoid contact with eyes and skin. If contacted, flush eyes or rinse skin with a large amount of water. If irritation, persists, consult a physician.
(10) Clinical diagnosis should be made synthetically based on clinical symptoms and examination results.
(11) Do not use reagents beyond the expiration date.
(12) There are possibility the right result may not be obtained if non-specific reaction material existed in a specimen.
(13) Calibration should be executed in every assay.

[Package, Storage and Expiry] ※plan

Product	Package	Storage	Expiry
Reagent 1	2000 mL	2-8 degreeC	1 year
Reagent 2	500 mL	2-8 degreeC	1 year
Calibrator	50mL×6Levels	2-8 degreeC	1 year

[Reference]
References
1) Okada Y, et al J Biol Chem, 261:14245-14255,1986
2) Rheumatology 35(1):15-24, 1995
3) J.New Rem.&Clin.Vol.50 No.1 2001

ACTIF
3-27-3 Kyodo, Setagaya-ku, Tokyo 1560052 JAPAN
TEL&FAX: +81(0)3-6413-1860 www.actifcorp.com