

**ECM / COLLAGEN ANTIBODY
TITRATION BY ELISA**

This test is used to check on the specificity and titer of an antibody or to detect its possible cross-reactivity with different antigens.

REAGENTS AND EQUIPMENT

- 96 wells flexible assay microplates (Microtest III, Falcon, 3912)
- PBS, pH = 7.2-7.4 (BioMerieux, 75511)
- BSA (Sigma, A9647)
- 30% H₂O₂ (Sigma, H0904)
- 4 Aminoantipyrine (4 AMP, Sigma, A4382)
- Phenol (Sigma, P3653)
- Peroxidase-labelled rabbit and mouse anti-IgG (Biorad, 75011 and 75031 respectively)
- Chromogen solution :
 - . PBS : 50ml
 - . Phenol : 118mg
 - . 4 AMP : 24mg
 - . 30% H₂O₂ : 10µl (added extemporaneously)
- Microplates stirrer (Dynatech-Vari Shaker)
- Spectrophotometer (Titertek-Multiskan)

METHOD**1. Antigen fixation ;**

- Dilute the antigen in PBS at the appropriate concentration
- Add 200 µl of this solution in each well
- store overnight at + 4°C
- Wash 3 times for 5 min. each in PBS (at + 20°C)

2. Incubation with the primary antibody ;

- Prepare a range of antibody dilutions in PBS + 3% BSA
- Add 100µl of each antibody dilution per well
- Incubate for 90 min. at + 20°C under moderate stirring
- Wash 3 times for 5 min. each in PBS (at + 20°C)

3. Incubation with the secondary antibody - peroxidase conjugate ;

- Dilute the appropriate conjugate at 1:100 in PBS + 3% BSA
- Add 100µl of this solution per well
- Incubate for 90 min. at + 20°C under moderate stirring
- Wash 3 times for 5 min. each in PBS (at + 20°C)

4. Colorimetric reaction ;

- Add 100µl of the chromogen solution per well
- Incubate for 90 min. at + 20°C under moderate stirring

Read the optical density of the stained reaction with the spectrophotometer at 450nm