

IHC TECHNIQUE FOR THE LOCALIZATION OF COLLAGENS IN FROZEN TISSUE SECTIONS (1)

THE UNDERLINED STEPS OF THE FOLLOWING PROTOCOL ARE ESSENTIAL WITH RAT TISSUES AND IN CASES OF STRONG BACKGROUND.

Unless specified otherwise, all steps must be carried out in a humid chamber at $\pm 20^{\circ}\text{C}$.

- . **Sticking** on silanized slides of 5 μm thick frozen tissue sections.
- . **Fixation** of tissue sections in ice cold acetone (-20°C) : 10min
- . **Air drying** at room temperature ($\pm 20^{\circ}\text{C}$) : 10min
- . **Treatment ;**
 - Hyaluronidase (Sigma : H3506 type I-S) 0.2% / TBS : 15min, **37°C**Rinse quickly first and then again for 5min with TBS.
- . **Immuno-labelling ;**
 - **Primary antibody*** diluted in TBS + 3% BSA* + 1% NGS* : overnight
 - **Inhibition of unspecific activity** (TBS + 3% BSA + 0.9% NaCl) : 20minRinse quickly first and then again for 10 min with TBS + 0.2% Tween 20 after each of the above 2 steps.
 - **Inhibition of endogenous peroxidases** (10ml TBS + 3% BSA + 500 μl H₂O₂ at 30 vol. + 10mg NaN₃*) : 20min
 - **Labelling** : Envision kit (Dako, K4002) : 45minRinse quickly first and then again for 10 min with TBS after each of the above 2 steps.
- . **Staining ;**
 - DAB*+ chromogen (Dako, K3468) : 2-5min
(1.5ml TBS + 0.5ml kit buffer + 2 drops of DAB+)Rinse for 10min with running tap water.

. **Counter staining ;**

- Aqueous Harris Hematoxylin (diluted 2/3 in distilled water) : 5min

Rinse for 10min with running tap water

- . **Differentiation** with ammonia water (250ml water + 2ml ammonia at 30%) : 2min

- . **Section Mounting** in aqueous mounting medium
(Faramount, Dako, S3025)

BSA* : Bovine Serum Albumin

DAB*: Diaminobenzidine

NaN₃* : Sodium azide

NGS* : Normal Goat Serum

NH₄Cl* : Ammonium Chloride

Primary antibody*: Specific, purified rabbit ECM antibody

TBS* : TRIS buffer , pH 7.6 (Dako, S3001)