
Alcian Blue Alizarin Reds

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Title: New aspect of Skeleton Differential Staining by Alizarin Red S and Alcian Blue.

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Abstract: Using specific skeletons staining with alizarine red S (AR) and alcian blue (AB) which is a significant method for of ossification centers during embryogenesis. One major problem in this method was been percipitation of chemical stain which has been resulted in weak to no reaction in different stages of bone and cartilage development. The purpose of this study was to develop new way to over come this technical problem. By using high concentration of AR (2.5 volume) combined with less concentration AB (0.5 volume) as well as decreasing processure time from 3 days to 1.5 and also we decreased the acidity of staining solution up to pH 5, we were able to show that after clearing of embryos, the soft tissues are absoulty clear and cartilages and bones were stained perfectly. It seems that with modify processures, dye can penetrate the embryonic tissues and remain in place after pentration. As high acidity may decreased the amount of bone, it is recommoned to reduced the rate of acidity.

Key words: Alizarin reds, Alcian blue, Bone and cartilage.

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pH () Balb/C ()

%

pH

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Dawson

()

()

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Wassersug

()
()

Merck
Reidel
Merk

Alizarin red S
Alcian blue 8 GX
%

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GX8 % /
%

pH

GX

balb/c

pH=4/5-5

()

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% %

% %

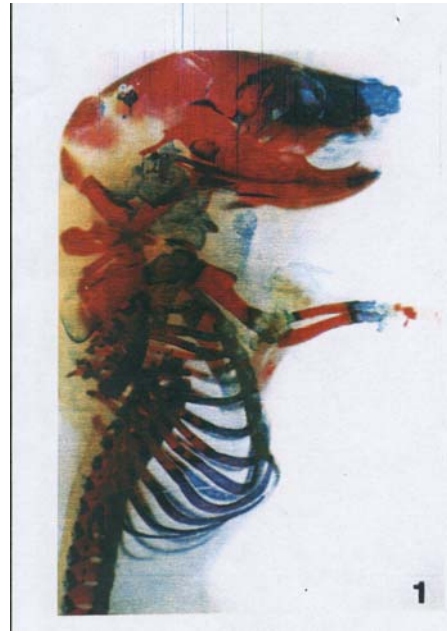
BH2

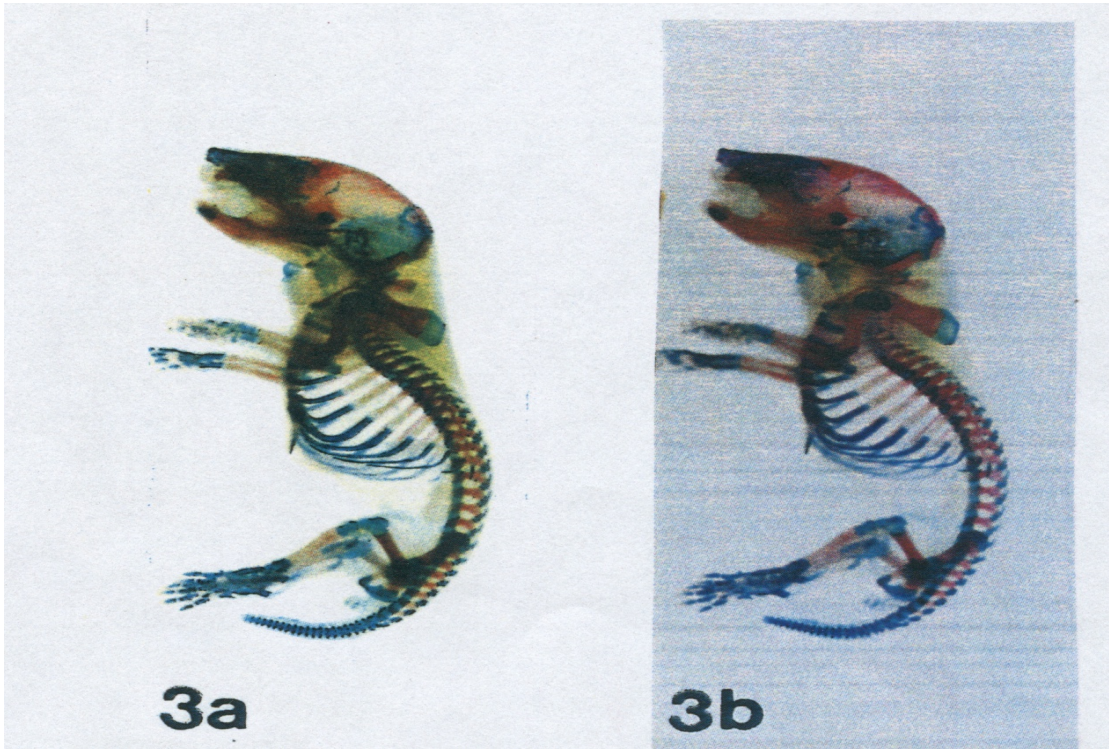
%

(P < /)

()

(P < /)





3a

3b

Archive

a

: b a

b.

%

(b a)

8GX

()

Anthraquinone

()

pH

Critical electrolyte Concentration (CEC1-4)

8G 7G 5G

GX 8GS

(P < /)

(X) 8GX

(S) 8GS

pH

pH

/

pH

.()

.()

Jean Mcleod

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.()

pH

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