

Fig. 3. Staining of the squamous epithelium of the uterine cervix using p73-1.1 antibody. Note the nuclear and granular cytoplasmic positivity accented in the basal - suprabasal layers.

Formalin-fixed, paraffin-embedded tissue, antigen retrieval in 0.001 M EDTA-NaOH buffer, pH 8.0. Concentration of antibody 1 $\mu\text{g}/\text{ml}$, detection Vector Elite ABC, DAKO DAB+. Magnification 400x.

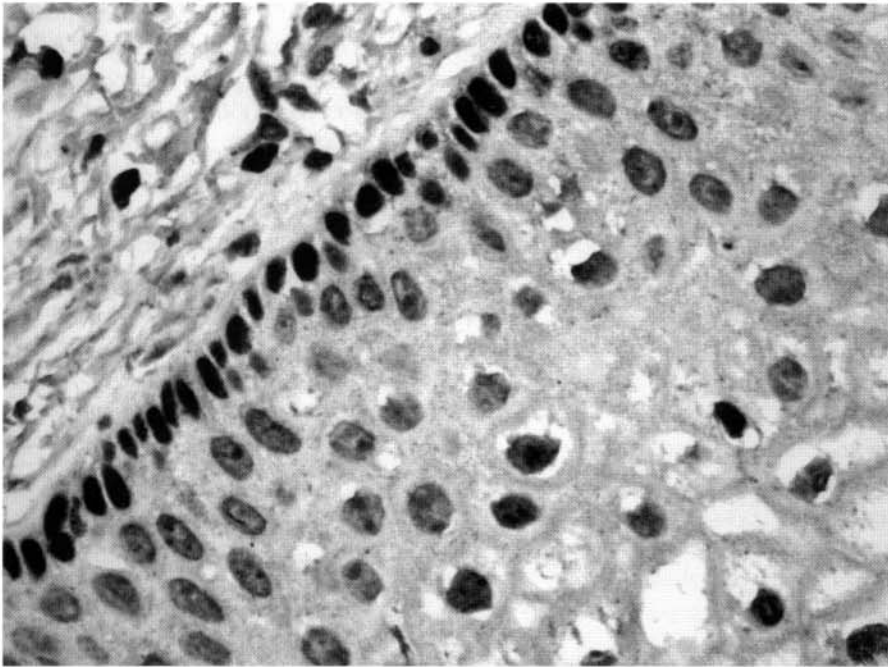


Fig. 4. Staining of the squamous epithelium of the uterine cervix using p73 α -1.1 antibody. Note the nuclear positivity, confined mostly to the basal layer. Formalin-fixed, paraffin-embedded tissue, antigen retrieval in 0.001 M EDTA-NaOH buffer, pH 8.0. Concentration of antibody 1 $\mu\text{g}/\text{ml}$, detection Vector Elite ABC, DAKO DAB+. Magnification 400x.

high affinity and β and δ isoforms with lower affinity (Fig. 1).

Both monoclonal antibodies p73-1.1 and p73 α -1.1 are useful for immunohistochemistry with detection of p73 protein isoforms in the formalin-fixed, paraffin-embedded tissue samples upon antigen retrieval (Figs. 3 and 4).

Our data suggest that for construction of MAb against only one specific isoform of the p73 protein it is better to use a synthesized isoform-specific epitope rather than the full-length protein, to exclude the possibility of obtaining an antibody reacting with all other isoforms of the p73 protein.

Properties

Antibodies p73-1.1 (IgA) and p73 α -1.1 (IgG₁) can recognize the p73 α protein under denaturing and non-denaturing conditions with different degrees of cross-reactivity with p73 isoforms. p73 α -1.1 is more specific and recognizes only the α isoform of the p73 protein while the monoclonal antibody p73-1.1 recognizes the α , β , γ and δ isoforms. Both antibodies can be used for analysis of p73 expression by immunoblotting and immunohistochemistry. Monoclonal antibody p73 α -1.1 can also be used for immunoprecipitation and ELISA. The antibody p73 α -1.1 seems to be more suitable for immunocytochemistry or immunohistochemistry, since it does not display any cross-reactivity with isoforms other than p73 α . The results from immunohistochemistry suggest that both antibodies could be used for characterization of nuclear and cytoplasmic expression of the p73 homologues.

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