SELECTIVE D2-40 LYMPHATIC ENDOTHELium IMMUNOREACTIVITY IN DEVELOPING HUMAN FETAL SKIN APPENDAGES

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ABSTRACT

D2-40 is a novel monoclonal antibody that recognizes a 40,000 Da O-linked sialoglycoprotein podoplanin. Although its use is becoming more common, little work has been done with human foetuses. We initiated an evaluation of D2-40 antibody immunoreactivity in developing cutaneous adnexa of human fetuses at various gestational ages. Starting from a retrospective cohort of 1,098 human fetal autopsies we identified and selected a total of 48 fetuses ranging from the 12th week gestational age to term appropriate for this study. We demonstrated that the gems of the hair follicles were D2-40 negative in fetuses from the 12th to 15th week gestation, positive in fetuses between the 16th and 20th week of gestation, negative in fetuses from the 21st week gestation to term. Normal adult controls were also negative. This is the first report to demonstrate intense D2-40 immunoreactivity in the gems of hair follicles of developing human skin.