

Supplementary Table 1. Composition of the media used for culture of the isolated FGSCs

Basal components	Growth factors	Supplement
1. DMEM/F12 (Sigma Aldrich) supplemented with: insulin–transferrin–selenium A (1:100 dilution; Sigma Aldrich), 1 mM sodium pyruvate (Sigma-Aldrich), 3 mg/ml AlbuMAX I (Invitrogen), 2 mM L-glutamine (Sigma Aldrich), 0.1 mM 2-mercaptoethanol (Sigma Aldrich), 1 mM nonessential amino acids (Invitrogen), 60 µM putrescine (Sigma-Aldrich), penicillin/streptomycin (Invitrogen).	20 ng/ml EGF 10 ng/ml bFGF 20 ng/ml GDNF 10 ³ U/ml LIF	10% FBS
2. DMEM/F12 (Sigma Aldrich) supplemented with: insulin–transferrin–selenium A (1:100 dilution; Sigma Aldrich), 1 mM sodium pyruvate (Sigma-Aldrich), 3 mg/ml AlbuMAX I (Invitrogen), 2 mM L-glutamine Sigma Aldrich), 0.1 mM 2-mercaptoethanol (Sigma Aldrich), 1 mM nonessential amino acids (Invitrogen), 60 µM putrescine (Sigma-Aldrich), penicillin/streptomycin (Invitrogen).	20 ng/ml EGF 10 ng/ml bFGF 20 ng/ml GDNF 10 ³ U/ml LIF	2 % N21-Max supplement

human bFGF (Sigma-Aldrich); recombinant rat GDNF (Sigma-Aldrich), mouse epidermal growth factor (Sigma-Aldrich), LIF (Sigma-Aldrich) and N21-Max Supplement (R&D Systems).

Supplementary Table 2. Composition of the media used for *in vitro* differentiation culture of the isolated FGSCs into OLCs.

Basal components	Growth factors	Supplement
DMEM/F12 (Sigma Aldrich) supplemented with insulin–transferrin–selenium A (1:100 dilution; Sigma Aldrich), 1 mM sodium pyruvate (Sigma-Aldrich), 2 mM L-glutamine (Sigma Aldrich), 1 mM nonessential amino acids (Invitrogen), penicillin/streptomycin (Invitrogen).	20 ng/ml EGF 10 ng/ml bFGF 20 ng/ml GDNF 0.05 IU/ml FSH 0.03 IU/ml LH 1 µg/ml Estradiol 0.01 mM Dibutyryl cAMP	5 % fetal bovine serum 5 % porcine follicle fluid

Mouse epidermal growth factor (EGF) (Sigma-Aldrich), human basic fibroblast growth factor (bFGF) (Sigma-Aldrich); recombinant rat Glial cell line-derived neurotrophic factor GDNF (Sigma-Aldrich), follicle stimulation hormone (FSH) (Sigma-Aldrich), luteinizing hormone (LH) (Sigma-Aldrich), Estradiol (Sigma-Aldrich), Dibutyryl cyclic-AMP (Sigma-Aldrich)