



**Supplementary Figure 1. Fluorescently labeled neutral glycosphingolipids are decreased in patient's fibroblasts.**

Fibroblasts of the patient or normal healthy control subject were cultured in the presence of 1.45  $\mu\text{M}$  fluorescently labelled BODIPY® FL C5 G<sub>M1</sub> ganglioside for 72 h. Total lipids were extracted from cell pellets with 1:1 chloroform/methanol mixture and the neutral lipids were separated from gangliosides and analysed by TLC on silica plates. The fluorescence image of the TLC plate was acquired on G:Box Chemi XQR system.