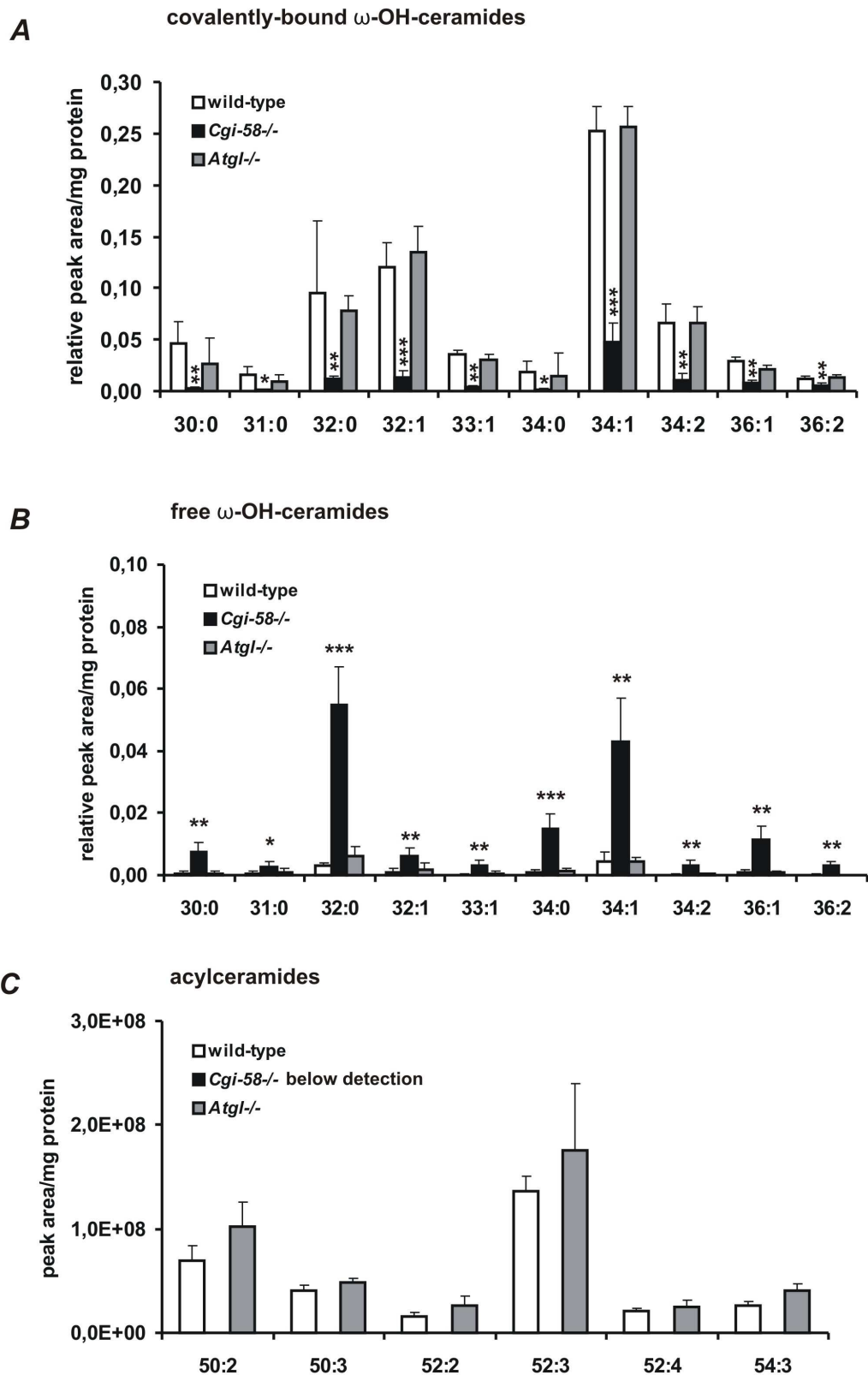


Supplementary Figure S1. Relative abundance of ceramide species in the epidermis of newborn wild-type, *Cgi-58*^{-/-}, and *Atgl*^{-/-} mice.

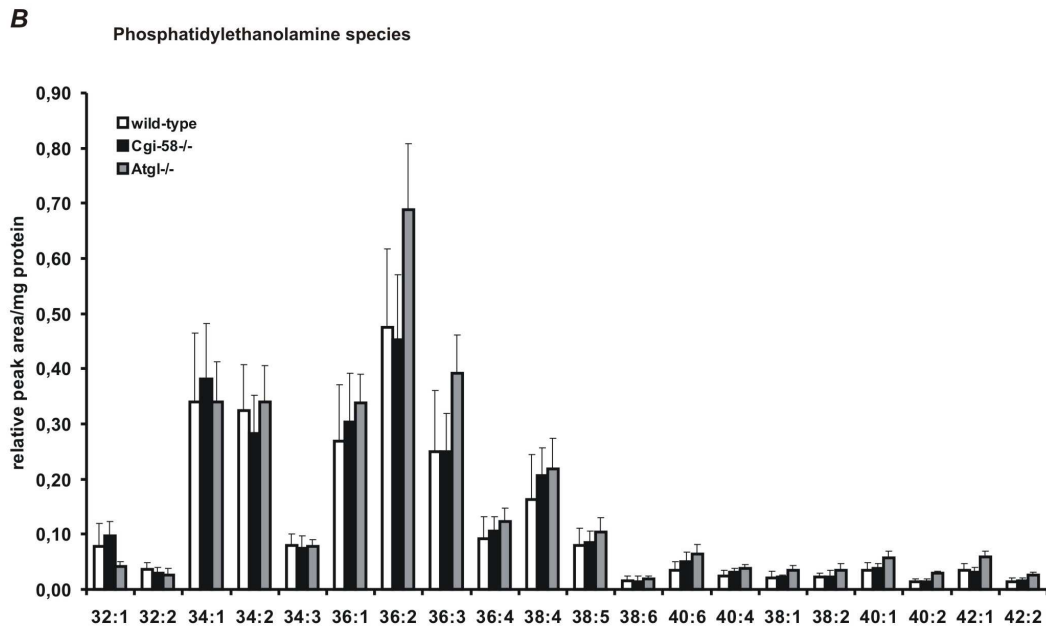
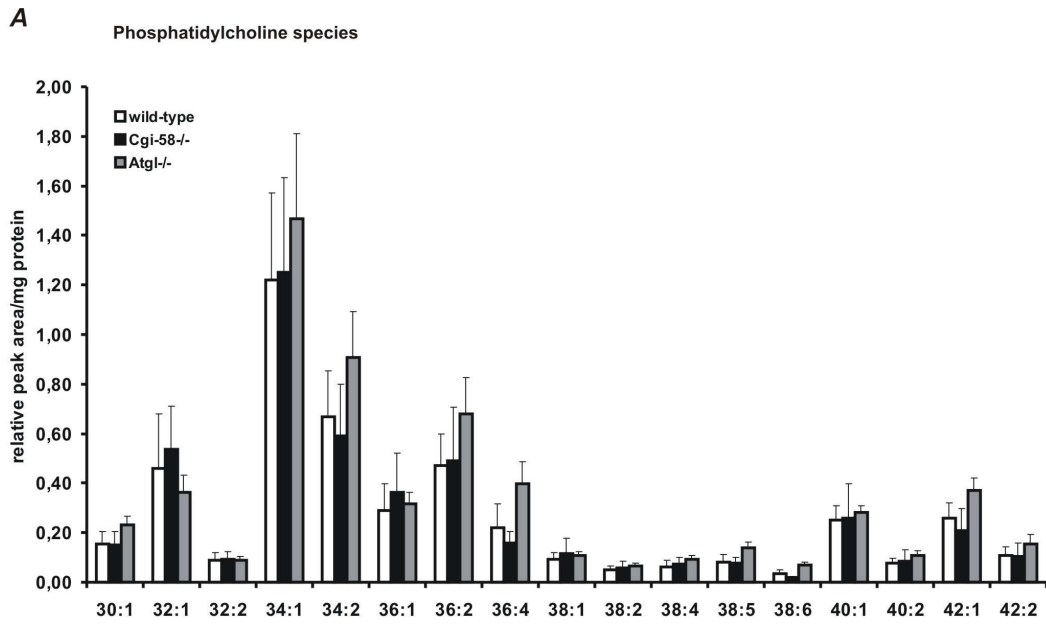
Epidermal lipids were extracted from newborn wild-type, *Cgi-58*^{-/-}, and *Atgl*^{-/-} mice. Free ω -OH ceramides (**A**) and acylceramides (**B**) were analyzed by UPLC-MSMS. Covalently-bound ω -OH ceramides (**C**) of the extracted epidermises were released by mild alkaline hydrolysis and analyzed by UPLC-MSMS. Peak areas of ceramide species were normalized to epidermal protein content. Data are means \pm S.D. (n=3-6) and representative for 3 independent experiments.

Supplementary Figure S2. Relative abundance of the major phospholipid species in the epidermis of newborn wild-type, *Cgi-58*^{-/-}, and *Atgl*^{-/-} mice.

Epidermal lipids were extracted from newborn wild-type, *Cgi-58*^{-/-}, and *Atgl*^{-/-} mice. Phosphatidylcholine (**A**) and phosphatidylethanolamine (**B**) were analyzed by UPLC-MSMS. Peak areas of phospholipid species were normalized to epidermal protein content. Data are means \pm S.D. (n=3-6) and representative for 3 independent experiments.



Supplementary Figure S1



Supplementary Figure S2