

Sodium Taurocholate Cotransporting Polypeptide (NTCP)

Introduction: Sodium (Na^+) taurocholate cotransporting polypeptide (NTCP) belongs to the solute carrier family of transporters (SLC10A1) and transports predominantly bile salts and sulfated compounds. Uptake of bile salts occurs largely in a sodium-dependent manner. NTCP is localized in the basolateral plasma membrane of hepatocytes.

Methods: A cell platform using stable transfected HEK293 cells expressing NTCP was generated. The uptake function of NTCP was analyzed with Cholyl-Lysyl-Fluorescein (CLF). The uptake was inhibited by addition of the reference inhibitor Cholate.

NTCP (SLC10A1)

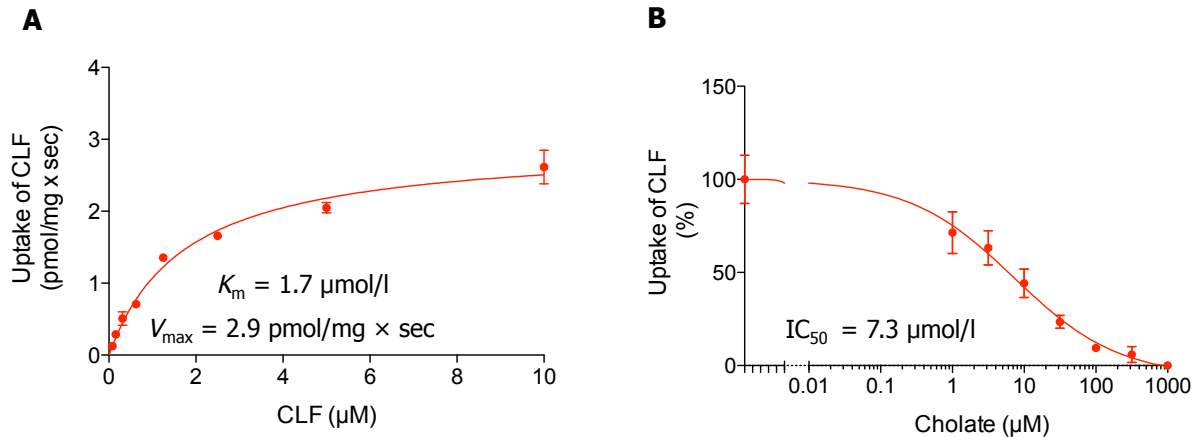


Figure: Concentration dependent uptake of CLF (A) mediated by NTCP. The NTCP mediated uptake of CLF was inhibited by Cholate (B).