

# **THE MHC-RELATED Fc RECEPTOR FOR IgG (FcRn) CONTRIBUTES TO THE TRANSENDOTHELIAL FLUX OF ALBUMIN**

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The MHC-related Fc receptor for IgG (FcRn) has been shown also to protect albumin from degradation<sup>1</sup>. We propose that a consequence of this receptor-mediated pathway is an increase in the trafficking of albumin across the endothelium. Through pharmacokinetic modeling of radioiodinated albumin decay, we show that FcRn-deficient mice have an approximately 18% lower permeability-surface area product (mL/day) than wild-type mice. Therefore, each day in the mouse, FcRn is likely responsible for about one milliliter of fluid movement causing the flux of over 40 mg of albumin across the endothelium. While these results do not indicate that FcRn is the sole participant in transendothelial transport of albumin, FcRn is implicated as a notable contributor to albumin transport.

1. Chaudhury, C. et al. (2003) J Exp Med. 197, 315-322.