MULTISPAN
Assay Experts in GPCRs and Beyond

MULTISCREEN^{TM} STABLE CELL LINE HUMAN RECOMBINANT ZNT8 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: C2002-1

Lot Number: C2002-1-043015

Quantity: 1 vial (2 x 10^6) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: CHO-K1

Transfection: Expression vector containing full-length human ZnT8 cDNA (GenBank Accession Number NM_173851.2)

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM/F12, 10% FBS, 400 μg/mL G418, Non-Essential Amino Acids

Stability: In progress

Background: Zinc transporter ZnT-8 is highly expressed in pancreatic β-cells and is a key protein for both zinc accumulation and regulation of insulin secretion. Studies have demonstrated that mice lacking ZnT-8 globally were more susceptible to diet induced obesity. It has been suggested that ZnT-8 contributes to the risk of developing type 2 diabetes through β-cell- and non-β-cell-specific effects.

Application: Functional assay

Figure 1

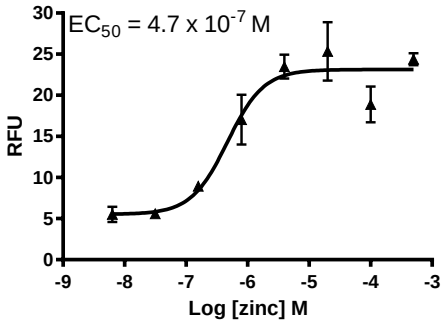

Figure 1. Dose-dependent zinc transport upon treatment with ligand, monitored with Flexstation.

References:

A. B. Hardy et al. "Effects of high-fat diet feeding on Znt8-null mice: differences between β-cell and global knockout of Znt8." *Am J Physiol Endocrinol Metab.* 2012 May 1; 302(9): E1084–E1096.

Tamara J. Nicolson et al. "Insulin Storage and Glucose Homeostasis in Mice Null for the Granule Zinc Transporter ZnT8 and Studies of the Type 2 Diabetes–Associated Variants". *DIABETES,* VOL. 58, SEPTEMBER 2009

Fabrice Chimienti, et al. "Identification and Cloning of a -Cell–Specific Zinc Transporter, ZnT-8, Localized Into Insulin Secretory Granules." *DIABETES,* VOL. 53, SEPTEMBER 2004

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