

## MULTISCREEN™ STABLE CELL LINE HUMAN RECOMBINANT ZNT3 RECEPTOR

### Data sheet

#### PRODUCT INFORMATION

**Catalog Number:** C2001-7

**Lot Number:** C2001-7-050415

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** HeLa

**Transfection:** Expression vector containing full-length human ZnT3 cDNA (GenBank Accession Number NM\_003459.4)

**Recommended Storage:** Liquid nitrogen upon receiving

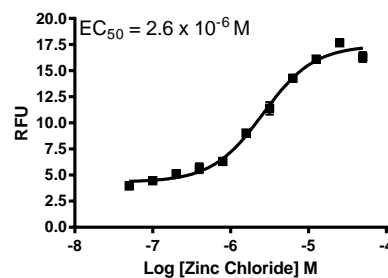
**Propagation Medium:** DMEM/F12, 10% FBS, 400  $\mu$ g/mL G418, Non-Essential Amino Acids

**Stability:** In progress

**Background:** Zinc transporter-3 (ZnT-3) is expressed in regions of the brain that are rich in histochemically reactive zinc, including entorhinal cortex, amygdala, and hippocampus. ZnT-3 protein is most abundant in the zinc-enriched mossy fibers that project from the dentate granule cells to hilar and CA3 pyramidal neurons.

**Application:** Functional assay

**Figure 1**



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

#### References:

Stefano L. Sensi et al. "The Neurophysiology and Pathology of Brain Zinc." *J Neurosci.* 2011 November 9; 31(45): 16076–16085. doi:10.1523/JNEUROSCI.3454-11.2011

Damitha De Mel and Cenk Suphioglu. "Fishy Business: Effect of Omega-3 Fatty Acids on Zinc Transporters and Free Zinc Availability in Human Neuronal Cells". *Nutrients* 2014, 6, 3245-3258; doi:10.3390/nu6083245

Isamu Aiba<sup>1</sup>, et al. "Intracellular Dialysis Disrupts Zn<sup>2+</sup> Dynamics and Enables Selective Detection of Zn<sup>2+</sup> Influx in Brain Slice Preparations." *J Neurochem.* 2013 June ; 125(6): 822–831. doi:10.1111/jnc.12246

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