

Sodium-Dependent SLC Transporter assay

A High-Throughput Solution for Measuring the Activity of SLC Transporters that cotransport sodium ions

The Sodium-Dependent SLC Transporter Assay is specifically designed to detect the activity of sodium-dependent solute carrier (SLC) transporters. These include transporters from the SLC6 family, which are critical for the movement of neurotransmitters across cell membranes.

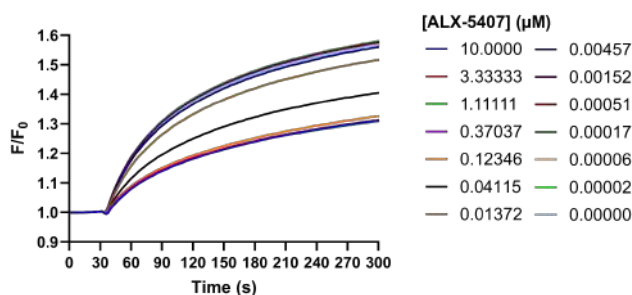
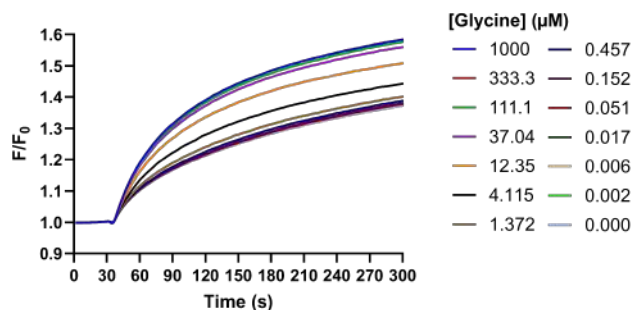
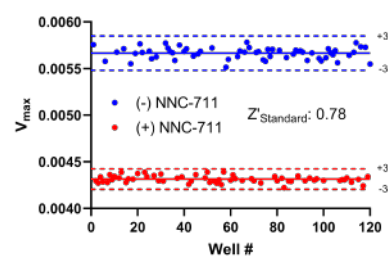
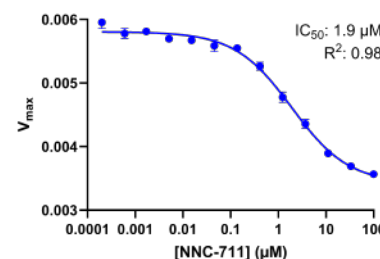
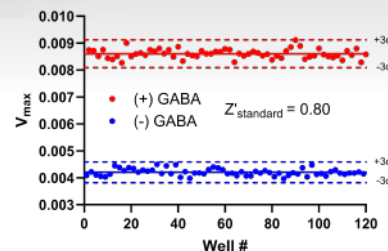
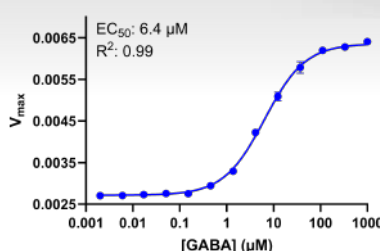


Applications for drug discovery as well as basic research, such as:

- Hit finding and lead optimization
- Identification of substrates, potentiators, and inhibitors of sodium-dependent SLC transporters

KEY FEATURES

- SLC6 Transporter Activity:** Facilitates the measurement of neurotransmitter transport mediated by SLC6 transporters
- Measures Sodium Cotransport:** Directly measures sodium cotransport: the native ion associated with transporter activity
- Complete Solution:** Validated cell lines for select targets can be combined with an easy-to-use kit for off the shelf reliability
- Probe More SLCs:** Suitable for studying both **electrogenic** and **electroneutral** SLC transporters



APPLICATIONS

- Discovery of novel molecules that modulate SLC transporters
- Characterizing the pharmacology of sodium-dependent SLC transporters

ASSAY DATA HIGHLIGHTS

- GAT1 (SLC6A1)**
 - Z' factor of 0.799 demonstrating a robust and reliable assay
 - IC₅₀ for NNC 711 measured at 1.5 µM
- GlyT1 (SLC6A9)**
 - IC₅₀ for ALX 5407 determined to be 22.8 nM (+ Glycine)
 - High reproducibility with large signal windows (Z' = 0.8)
 - Stable cell line available for purchase