



Sendai Virus Clearance Report

Assay Overview

The Sendai Virus (SeV) Clearance Assay conducted by the Stem Cell Engineering Core utilizes TaqMan Gene Expression Assays to detect SeV transgenes. The assay employs the TaqMan Fast Advanced Master Mix for qPCR (Applied Biosystems). These assays are designed for quantitative real-time PCR analysis of gene expression, incorporating a pair of unlabeled PCR primers and a TaqMan probe. This probe features a FAM dye label on the 5' end, alongside a minor groove binder (MGB) and a non-fluorescent quencher (NFQ) on the 3' end.

Specific TaqMan assays used to semi-quantify the expression of Sendai viral genes include:

- SeV (Mr04269880_mr, 4331182)
- SEV-CMYC (Mr04269876_mr, 4453320)
- SEV-KLF4 (Mr04421256_mr, 4448892)
- SEV-KOS (Mr04421257_mr, 4453320)

Actin beta (Act B, Assay ID: Hs01060665_g1) serves as an internal control.

Samples are deemed negative if their Ct values show no amplification or are comparable to those of the negative control sample's Ct values for the corresponding genes' mRNA.

User/PI: Samuele Marro

Assay Date: 8/6/2024

Assay Results

Samples	SEV (Ct)	SEV-KOS (Ct)	SEV-cMYC (Ct)	SEV-KLF4 (Ct)	SEV-ActB (Ct)
ISMMSi060-A	negative	negative	negative	negative	20.1
ISMMSi060-A-1	negative	negative	negative	negative	20.1
Negative Ctrl	negative	negative	negative	negative	20.7
Positive Ctrl	28.7	26.69	27.62	19.48	20