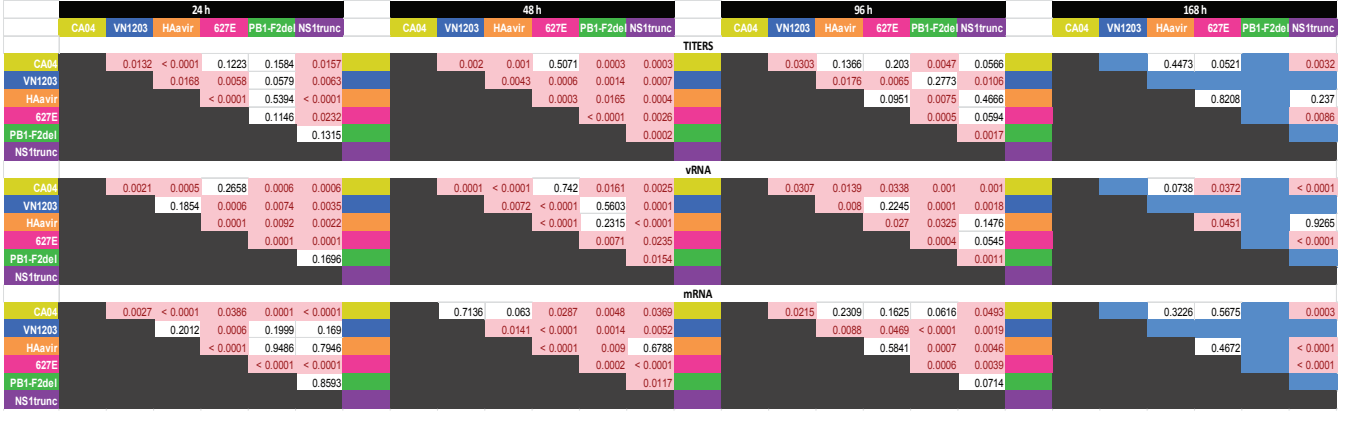SUPLLEMENTARY FIGURE 2