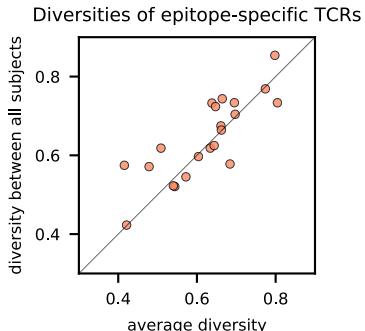


**A**

$$\text{diversity}(s, t) = \left( \frac{\sum_{i=0}^{N_s} \sum_{j=0}^{N_t} \exp\left(-\frac{\|\mathbf{x}_{s,i} - \mathbf{x}_{t,j}\|^2}{2l^2}\right)}{N_s N_t} \right)^{-1}$$

$\text{diversity}(s, t)$  describes the diversity between subjects  $s$  and  $t$ .  $N_s$  and  $N_t$  are numbers of TCRs  $\mathbf{x}_{s,i}$  and  $\mathbf{x}_{t,j}$  for the subjects  $s$  and  $t$ , respectively.

**B****C**