$$\frac{\binom{1}{2}\rho}{\binom{1}{2}\binom{1}{2}} = \frac{\binom{1}{2}\binom{1}{2}}{\binom{1}{2}\binom{1}{2}} = \frac{\binom{1}{2}\binom{1}{2}}{\binom{1}{2}\binom{1}{2}} = \frac{\binom{1}{2}$$