$$
\begin{aligned}
\Psi_{16} &= C_1\left(-|00du\rangle + |00ud\rangle + |0du0\rangle - |0ud0\rangle + |d00u\rangle - |du00\rangle - |u00d\rangle + |ud00\rangle\right) \\
&\quad + C_2\left(|0d0u\rangle - |0u0d\rangle - |d0u0\rangle + |u0d0\rangle\right)
\end{aligned}
$$

$$
C_1 = \frac{i}{4}
$$

$$
C_2 = \frac{1}{2\sqrt{2}}
$$