

4. 向量 $\vec{a}, \vec{b}, \vec{c}$ 满足 $|\vec{a}|=|\vec{b}|=1, |\vec{c}|=\sqrt{2}$, 且 $\vec{a}+\vec{b}+\vec{c}=\vec{0}$, 则 $\cos\langle\vec{a}-\vec{c}, \vec{b}-\vec{c}\rangle=$ ()

A. $-\frac{1}{5}$

B. $-\frac{2}{5}$

C. $\frac{2}{5}$

D. $\frac{4}{5}$