

## Highlights

- CB2 receptors play an important role in diabetic cardiomyopathy.
- CB2 receptors in the heart represent an important pharmacological target for future therapeutics.
- CB2 receptor activation by a natural cannabinoid ligand; BCP mitigates oxidative stress in DCM mice.
- CB2 receptor activation by BCP inhibits cardiac hypertrophy and TLR4 mediated NF- $\kappa$ B/MAPK activation.
- CB2 receptor activation by BCP inhibits dyslipidemia and insulin resistance in DCM mice.
- Abrogation of CB2 receptor activation mediated protective effects of BCP demonstrate CB2 receptor dependent mechanisms.