## Highlights

- Cannabis sativa L. extract (CSE) inhibits the proliferation of activated T lymphocytes in concentration not inducing apoptosis/necrosis or affecting cell viability.
- CSE suppresses the CD25 marker expression and degranulation.
- CSE reduces the IL-2 and IFN-γ cytokine production.
- CSE suppresses the AP-1 and NFAT-reporter activation.
- CSE acts via specific CB2 and TRPV1 receptors.