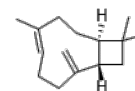


Product Name : Beta-caryophyllene
Cat. No. : PC-28081
CAS No. : 87-44-5
Molecular Formula : C₁₅H₂₄
Molecular Weight : 204.36
Target : Cannabinoid Receptor
Solubility : 10 mM in DMSO



Biological Activity

Beta-caryophyllene (β-Caryophyllene, (E)-BCP) is a high affinity, selective agonist of **cannabinoid receptor type 2 (CB2)** with Ki of 115 nM, also possesses significant anticancer activities, affecting growth and proliferation of numerous cancer cells.

Beta-caryophyllene (β-Caryophyllene, (E)-BCP) inhibits adenylate cyclase, leads to intracellular calcium transients and weakly activates the mitogen-activated kinases Erk1/2 and p38 in primary human monocytes.

Beta-caryophyllene (β-Caryophyllene, (E)-BCP) (500 nM) inhibits lipopolysaccharide (LPS)-induced proinflammatory cytokine expression in peripheral blood and attenuates LPS-stimulated Erk1/2 and JNK1/2 phosphorylation in monocytes.

Beta-caryophyllene (β-Caryophyllene, (E)-BCP) (5 mg/kg) strongly reduces the carrageenan-induced inflammatory response in wild-type mice but not in mice lacking CB(2) receptors.

Beta-caryophyllene modulates expression of stress response genes and mediates longevity in *Caenorhabditis elegans*.

References

- Javed H, et al. *Front Neurosci*. 2016 Aug 2;10:321.
 Gertsch J, et al. *Proc Natl Acad Sci U S A*. 2008 Jul 1;105(26):9099-104.
 da Silva SL, et al. *Eur J Pharmacol*. 2007 Dec 8;576(1-3):180-8.
 Fidyt K, et al. *Cancer Med*. 2016 Oct;5(10):3007-3017.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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