

[Open Peer Review on Qeios](#)

Fluticasone

National Cancer Institute

Source

National Cancer Institute. *Fluticasone*. NCI Thesaurus. Code C61767.

A synthetic trifluorinated glucocorticoid receptor agonist with antiallergic, antiinflammatory and antipruritic effects. Fluticasone binds and activates glucocorticoid receptor, resulting in the activation of lipocortin. Lipocortin, in turn, inhibits cytosolic phospholipase A2, which triggers a cascade of reactions involved in the synthesis of inflammatory mediators, such as prostaglandins and leukotrienes. Secondly, mitogen-activated protein kinase (MAPK) phosphatase 1 is induced, thereby leads to dephosphorylation and inactivation of Jun N-terminal kinase directly inhibiting c-Jun mediated transcription. Finally, transcriptional activity of nuclear factor (NF)-kappa-B is blocked, thereby inhibits the transcription of cyclooxygenase 2, which is essential for prostaglandin production.