



## Product Information

Product ID F4683

CAS No. 80474-14-2

Chemical Name

Synonym

Formula  $C_{25}H_{31}F_3O_5S$

Formula Wt. 500.57

Melting Point 272-273 °C

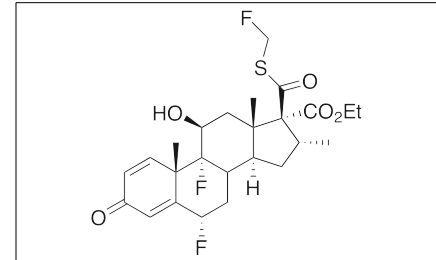
Purity ≥98%

Solubility 10 mg/ml DMSO

Store Temp Ambient

Ship Temp Ambient

**Description** Fluticasone is an agonist at  $\beta_2$ -adrenergic receptors that is clinically used to treat asthma and COPD; it exhibits anti-inflammatory, vasodilatory, anti-asthma, and anti-allergic activities. In airway epithelial cells, fluticasone increases expression of I $\kappa$ B kinase, preventing activation of NF- $\kappa$ B. In other in vitro models, fluticasone decreases lymphocyte activation, particularly mast cell activation, and decreases IL-6 levels. In animal models, fluticasone upregulates Smad7 and downregulates phospho-Smad2/3 and TGF- $\beta$ 1 levels, preventing eosinophilic inflammation and airway remodeling.



**Bulk quantities available upon request**

Product ID	Size
F4683	10 mg
F4683	25 mg
F4683	100 mg

**References** Kan-O K, Matsumoto K, Inoue H, et al. Corticosteroids plus long-acting  $\beta_2$ -agonists prevent double-stranded RNA-induced upregulation of B7-H1 on airway epithelium. *Int Arch Allergy Immunol.* 2013;160(1):27-36. PMID: 22948082.

Mendes ES, Horvath G, Campos M, et al. Rapid corticosteroid effect on beta(2)-adrenergic airway and airway vascular reactivity in patients with mild asthma. *J Allergy Clin Immunol.* 2008 Mar;121(3):700-4. PMID: 18086493.

Lee SY, Kim JS, Lee JM, et al. Inhaled corticosteroid prevents the thickening of airway smooth muscle in murine model of chronic asthma. *Pulm Pharmacol Ther.* 2008;21(1):14-9. PMID: 17142077.

Edwards MR, Haas J, Panettieri RA Jr, et al. Corticosteroids and beta2 agonists differentially regulate rhinovirus-induced interleukin-6 via distinct Cis-acting elements. *J Biol Chem.* 2007 May 25;282(21):15366-75. PMID: 17395587.

Booth H, Richmond I, Ward C, et al. Effect of high dose inhaled fluticasone propionate on airway inflammation in asthma. *Am J Respir Crit Care Med.* 1995 Jul;152(1):45-52. PMID: 7599861.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.