PRODUCT INFORMATION



Suplatast (tosylate)

Item No. 30316

CAS Registry No	.: 94055-76-2		
Formal Name:	[3-[[4-(3-ethoxy-2-		
	hydroxypropoxy)phenyl]amino]-		
	3-oxopropyl]dimethyl-sulfonium,		OH I
	4-methylbenzenesulfonate		
MF:	$C_{16}H_{26}NO_4S \bullet C_7H_7O_3S$		
FW:	499.6		
Purity:	≥98%	Š, N	
UV/Vis.:	λ _{max} : 223, 253 nm		• CH ₃ C ₆ H ₄ SO ₃ ⁻
Supplied as:	A crystalline solid		
Storage:	-20°C		
Stability:	≥4 years		
Information represents the product exectlications. Batch exectlic analytical results are provided on each certificate of analysis			

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Laboratory Procedures

Suplatast (tosylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the suplatast (tosylate) in the solvent of choice, which should be purged with an inert gas. Suplatast (tosylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of suplatast (tosylate) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of suplatast (tosylate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of suplatast (tosylate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Suplatast is an antiallergic agent.^{1,2} It inhibits IL-4 and IL-5 production in conalbumin-stimulated D10.G4.1 murine T helper 2 (Th2) cells in a concentration-dependent manner.¹ Suplatast (100 mg/kg) inhibits ovalbumin-induced increases in eosinophil and total cell numbers, as well as IL-4, IL-5, and IL-13, but not IFN- γ , levels in bronchoalveolar lavage fluid (BALF) in an ovalbumin-sensitized mouse model of asthma.² It also inhibits ovalbumin-induced increases in ovalbumin-specific IgE in serum and bronchial hyperresponsiveness to methacholine in the ovalbumin-sensitized mouse model of asthma.

References

- 1. Yamaya, H., Basaki, Y., Togawa, M., et al. Down-regulation of Th2 cell-mediated murine peritoneal eosinophilia by antiallergic agents. Life Sci. 56(19), 1647-1654 (1995).
- 2. Zhao, G.D., Yokoyama, A., Kohno, N., et al. Effect of suplatast tosilate (IPD-1151T) on a mouse model of asthma: Inhibition of eosinophilic inflammation and bronchial hyperresponsiveness. Int. Arch. Allergy. Immunol. 121(2), 116-122 (2000).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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