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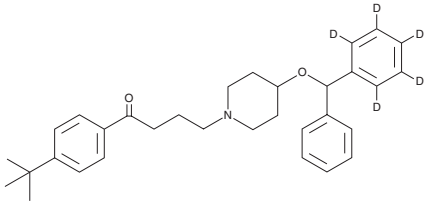
PRODUCT INFORMATION

Ebastine-d_5

Item No. 30758

CAS Registry No.:	1216953-13-7
Formal Name:	1-[4-(1,1-dimethylethyl)phenyl]-4-[4-(phenylphenyl-2,3,4,5,6-d_5-methoxy)-1-piperidinyl]-1-butanone
MF:	$C_{32}H_{34}D_5NO_2$
FW:	474.7
Chemical Purity:	≥95% (Ebastine)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_5); ≤1% d_0
Supplied as:	A solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ebastine-d_5 is intended for use as an internal standard for the quantification of ebastine (Item No. 15372) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Ebastine-d_5 is supplied as a solid. A stock solution may be made by dissolving the ebastine-d_5 in the solvent of choice, which should be purged with an inert gas. Ebastine-d_5 is slightly soluble in methanol (warmed).

Description

Ebastine is a histamine H_1 receptor antagonist and prodrug form of carebastine (Item No. 23076).[1] It is formed from carebastine by the cytochrome P450 (CYP) isoform CYP3A4. Ebastine binds to histamine H_1 receptors with an IC_{50} value of 45 nM. It is selective for histamine H_1 receptors over α_1-adrenergic and muscarinic M_1 and M_2 receptors (IC_{50}s = 183, 1,100, and >10,000 nM, respectively), as well as dopamine D_2 receptors and the serotonin (5-HT) receptor subtype 5-HT_{1A} at 1 and 10 µM, respectively.[2] Ebastine (1, 5, and 10 µM) inhibits T cell proliferation and the production of IL-4 and IL-5 in isolated human T cells.[3] It also reduces phytohemagglutinin-induced T cell migration and decreases LPS-induced IL-6 and TNF-α production by macrophages isolated from peripheral blood mononuclear cells (PBMCs). Ebastine inhibits histamine-induced and allergen-induced bronchospasm in guinea pigs (ED_{50}s = 115 and 334 µg/kg, respectively).[4] Formulations containing ebastine have been used in the treatment of allergic rhinitis and chronic idiopathic urticaria.

References

1. Vincent, J., Liminana, R., Meredith, P.A., *et al.* The pharmacokinetics, antihistamine and concentration-effect relationship of ebastine in healthy subjects. *Br. J. Clin. Pharmacol.* **26(5)**, 497-502 (1988).
2. Abou-Gharbia, M., Moyer, J.A., Nielsen, S.T., *et al.* New antihistamines: Substituted piperazine and piperidine derivatives as novel H_1-antagonists. *J. Med. Chem.* **38(20)**, 4026-4032 (1995).
3. Nori, M., Iwata, S., Munakata, Y., *et al.* Ebastine inhibits T cell migration, production of Th2-type cytokines and proinflammatory cytokines. *Clin. Exp. Allergy* **33(11)**, 1544-1554 (2003).
4. Llupià, J., Gras, J., and Llenas, J. Comparative antiallergic effects of second-generation H_1-antihistamines ebastine, cetirizine and loratadine in preclinical models. *Arzneimittelforschung* **53(2)**, 93-97 (2003).

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