PRODUCT INFORMATION

8-hydroxy Loxapine
Item No. 21786

CAS Registry No.: 61443-77-4
Formal Name: 2-chloro-11-(4-methyl-1-piperazinyl)-dibenzo[b,f][1,4]oxazepin-8-ol
Synonym: 8-OH Loxapine
MF: C_{18}H_{18}ClN_{3}O_{2}
FW: 343.8
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years

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

Description

8-hydroxy Loxapine (8-OH loxapine) is a metabolite formed when loxapine (Item No. 20760), an atypical antipsychotic, is metabolized by the cytochrome P450 isomorph CYP1A2.\(^1,2\) Loxapine displays high affinity for histamine, serotonin (5-HT), dopamine, and α\(_1\)-adrenergic receptors (K\(_i\) values = 7, 7.7, 9.5, 12, and 31 nM for H\(_1\), 5-HT\(_2A\), 5-HT\(_2C\), D\(_2\), and α\(_1A\)-adrenergic receptors, respectively).\(^3,4\) It reduces agitation associated with schizophrenia or bipolar disorder.\(^8\) 8-OH Loxapine is considered inactive as it has relatively low affinity to dopamine and 5-HT receptors compared to the parent compound, however, 8-OH loxapine inhibits [\(^{14}\)C]5-HT uptake in vitro (IC\(_{50}\) = 2 μM in human platelets).\(^5\)

References

1. Seeman, P., Corbett, R., and Van Tol, H.H. Atypical neuroleptics have low affinity for dopamine D\(_2\) receptors or are selective for D\(_4\) receptors. *Neuropsychopharmacology* 16(2), 93-110 (1997).