Buspirone hydrochloride

Product Number  B 7148
Storage Temperature  2-8 °C

Product Description
Molecular Formula:  \( \text{C}_{21}\text{H}_{31}\text{N}_{5}\text{O}_{2} \cdot \text{HCl} \)
Molecular Weight:  422.0
CAS Number: 33386-08-2
Melting Point:  201.5 - 202.5 °C

Buspirone is a partial 5-HT\textsubscript{1A} serotonin receptor agonist that has dopaminergic, noradrenergic, and serotonin-modulating properties.\textsuperscript{2,3} It is widely used in cell signaling and neuroscience research.

Buspirone has been used to mitigate the electrically stimulated 5-hydroxytryptamine outflow from rat cortical slices.\textsuperscript{4} The effect of buspirone on iontophoresis-mediated GABA response in cultured mouse spinal cord and cerebral hemisphere neurones has been studied.\textsuperscript{5} Buspirone and other anxiolytic compounds have been utilized in a study of stress-induced hyperthermia in singly housed mice.\textsuperscript{6} A comparison of buspirone and alnespirone in their effects on coeruleus neuronal activity in rats has been reported.\textsuperscript{7} Buspirone has been used to mitigate respiratory abnormalities in spinal cord-injured rats via the stimulation of serotonin 1A receptors.\textsuperscript{8}

A liquid chromatography method for the analysis of buspirone has been described.\textsuperscript{9} Single-solute adsorption equilibrium isotherms for buspirone have been determined.\textsuperscript{10}

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in methanol (50 mg/ml), with heat as needed, yielding a clear, colorless solution. It also has been reported to be soluble in water (10 mg/ml).

References
1. The Merck Index, 12th ed., Entry# 1528.
