Product Data Sheet

Product Name: Cyclobenzaprine hydrochloride
CAS No.: 6202-23-9
Cat. No.: HY-B0740
MWT: 311.85
Formula: C20H22ClN
Purity: >98%

Solubility: H2O: > 200 mg/mL

Mechanisms: Pathways: GPCR/G protein; Target: 5-HT Receptor
Pathways: Neuronal Signaling; Target: 5-HT Receptor

Biological Activity:
Cyclobenzaprine HCl is a skeletal muscle relaxant and a central nervous system (CNS) depressant.
Target: 5-HT Receptor 2A
Cyclobenzaprine is a skeletal muscle relaxant and a central nervous system (CNS) depressant.
Cyclobenzaprine was thought to be an alpha 2-adrenoceptor agonist that reduced muscle tone by
decreasing the activity of descending noradrenergic neurons. Cyclobenzaprine reduced the
monosynaptic reflex amplitude dose dependently and this effect was not inhibited by the alpha 2-
adrenoceptor antagonists idazoxan and yohimbine. Cyclobenzaprine-induced monosynaptic reflex
depression was not attenuated by noradrenergic neuronal lesions produced by 6-hydroxydopamine.
Cyclobenzaprine is a 5-HT2 receptor antagonist and that its muscle relaxant effect is due to
inhibition of serotonergic, not noradrenergic, descending systems in the spinal cord [1]. The
inhibitory e...

References:
[1]. Kobayashi, H., Y. Hasegawa, and H. Ono, Cyclobenzaprine, a centrally acting muscle relaxant,
[2]. Honda, M., T. Nishida, and H. Ono, Tricyclic analogs cyclobenzaprine, amitriptyline and
cypromeptadine inhibit the spinal reflex transmission through 5-HT(2) receptors. Eur J Pharmacol,

Caution: Not fully tested. For research purposes only

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