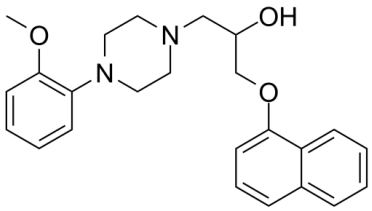
Data Sheet

Product Name:	Naftopidil
Cat. No.:	CS-2477
CAS No.:	57149-07-2
Molecular Formula:	C24H28N2O3
Molecular Weight:	392.49
Target:	Adrenergic Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Solubility:	H2O : < 0.1 mg/mL (insoluble); DMSO : 33.33 mg/mL (84.92 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Naftopidil (Flivas), a selective α1-adrenergic receptor antagonist or alpha blocker, is an antihypertensive drug. Target: α1-Adrenergic Receptor Naftopidil significantly improved the overall international prostatic symptom score ; from 19.2±7.9 to 11.7±5.8 in the M group and from 19.4±6.4 to 12.3±6.8 in the E group (p<0.0001), QOL score from 4.9±0.8 to 3.2±1.4 in the M group and from 5.0±0.8 to 3.6±1.3 in the E group (p<0.0001), and OAB symptom score from 7.8±2.6 to 5.0±2.5 in the M group (p<0.0001) and from 8.6±2.9 to 5.8± 3.3 in the E group (p<0.0001). naftopidil improves storage symptoms as well as voiding symptoms regardless of timing of administration [1]. The selectivity of naftopidil for prostatic pressure was the most potent among the test compounds. In addition, using cloned human alpha1-adrenoceptor subtypes, naftopidil was selective for the alpha1d-adrenoceptor with approximately 3- and 17-fold higher affinity than for the alpha1a- and alpha1b-adrenoceptor subtypes, respectively. The selectivity of naftopidil for prostatic pressure may be attributable to its high binding affinity for alpha1a- and alpha1d-adrenoceptor subtypes [2].

References:

[1]. Sakai, H., et al., [Efficacy of naftopidil in patients with overactive bladder associated with benign prostatic hyperplasia: prospective randomized controlled study to compare differences in efficacy between morning and evening medication]. Hinyokika Kiyo, 2011. 57(1): p. 7-13.

[2]. Takei, R., et al., Naftopidil, a novel alpha1-adrenoceptor antagonist, displays selective inhibition of canine prostatic pressure and high affinity binding to cloned human alpha1-adrenoceptors. Jpn J Pharmacol, 1999. 79(4): p. 447-54.

CAIndexNames:

1-Piperazineethanol, 4-(2-methoxyphenyl)-α-[(1-naphthalenyloxy)methyl]-

SMILES:

OC(CN1CCN(C(C=CC=C2)=C2OC)CC1)COC3=CC=CC4=CC=CC=C34

Caution: Product has not been fully validated for medical applications. For research use only.

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