Journal of Medicinal Chemistry

J. Med. Chem., 1996, 39(19), 3694-3700, DOI:10.1021/jm9603882

Terms & Conditions

Electronic Supporting Information files are available without a subscription to ACS Web Editions. The American Chemical Society holds a copyright ownership interest in any copyrightable Supporting Information. Files available from the ACS website may be downloaded for personal use only. Users are not otherwise permitted to reproduce, republish, redistribute, or sell any Supporting Information from the ACS website, either in whole or in part, in either machine-readable form or any other form without permission from the American Chemical Society. For permission to reproduce, republish and redistribute this material, requesters must process their own requests via the RightsLink permission system. Information about how to use the RightsLink permission system can be found at http://pubs.acs.org/page/copyright/permissions.html



Copyright © 1996 American Chemical Society

©1996 American Chemical Society Journal Of Medicinal Chemistry V39 Page 3694 Mabic Supplemental Page 1

JM9603882

Supplementary information

Lists of compounds used to validate the maximum size of MAO-B active site.

4-phenyl-R-substituted MPTP derivatives.

All of them have the same length as MPTP (1) (10.07 Å) and are issued from references 12 and 14

R	kcat/Km	R	kcat/Km
2-Me	1275	2,6-diMə	209
2-Et	295	3-Ме	650
2-n-Pr	86	3-F	900
2-OMe	233	3-CI	1132
2-CI	1353	3-Br	2036
2-i-Pr	53	3-OMe	944
2-CF3	520	3-CF ₃	514

4-(R-substituted-phenoxy)-N-methyl-1,2,3,6-tetrahydropyridine and 4-(aryloxy)-N-methyl-1,2,3,6-tetrahydropyridine derivatives.

All of them have the same length as 4-phenoxy derivative 33 (6.60 Å) and are issued from reference 28 and 6

R	kcat/Km	R	kcat/Km
2'-Me	1782	4'-Me	2019
2'-NO ₂	786	4'-NO ₂	191
2'-OMe	746	4'-OMe	746
2'-Cl	822	4'-Cl	1401
2'-Ph	132	4'-Ph	363
3'-Me	1747	4'-n-Bu	1090
3'-NO ₂	1410	4'-t-Bu	395
3'-OMe	721	4-a-Naph	565
3'-Cl	729	4-b-Naph	1214
3'-Ph	637		

4-(R-substituted-benzyl)-N-methyl-1,2,3,6-tetrahydropyridine and 4-(arylmethyl)-N-methyl-1,2,3,6-tetrahydropyridine derivatives.

All of them have the same length as 4-benzyl derivative 25 (6.72 Å) and are issued from reference 32

R	kcat/Km		kcat/Km
2-F	1440	4-F	1140
2-OMe	145	4-1	1190
3-Me	603	-a-Naph	105
3-F	2330	-b-Naph	310
4-Me	615	-9-Phen	inactive

4-(R-substituted-phenylethenyl)-N-methyl-1,2,3,6-tetrahydropyridine and 4-(arylethenyl)-N-methyl-1,2,3,6-tetrahydropyridine derivatives.

All of *cis* isomers have the same length as 4-phenylethenyl derivative **31** (7.96 Å), all of the *trans* isomers have the same length as 4-phenylethenyl derivative **30** (12.16 Å) and are issued from reference ³¹ and ²¹

R (<i>cis</i>)	kcat/Km	R (trans)	kcat/Km
'-Br	107	2'-OMe	16
2'-OMe	93	2'-Br	617
3'-Br	1056	2'-Me	< 10%
4'-Br	890	3'-Br	6
-a-Naph	49	4'-Br	98
		4'-F	138
		4'-Me	59
		4'-N(Me) ₂	67
		4'-OMe	53
		-a-Naph	21

N-R₁-4-R₂-1,2,3,6-tetrahydropyridine derivatives.

Data are issued from reference 32, 5, 15, 3, 10, 12

R ₁	R ₂	kcat/Km	Length
Me	methyl-thien-2-yl	3270	8.0
Мө	a-naphthylethyl	62	7.8
Ме	b-naphthylethyl	76	7.8
Me	ethyl-thien-2-yl	1059	8.4
Me	thien-3-yl	160	8.5
Мө	methyl-thien-3-yl	785	8.1
Me	ethyl-thien-3-yl	890	7.8
Ме	ethyl	41%	/ 7.8
n-butyl	phenyl	MPTP	13.5
cPr methyl	phenyl	inactive	12.2
2-ethanol	phenyl	inactive	12.0
		inactive	