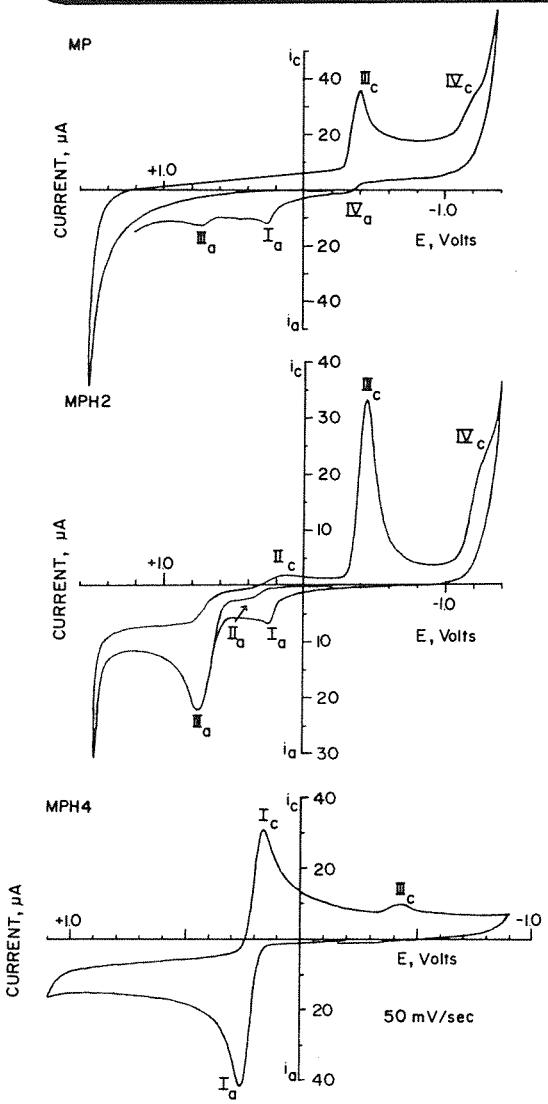
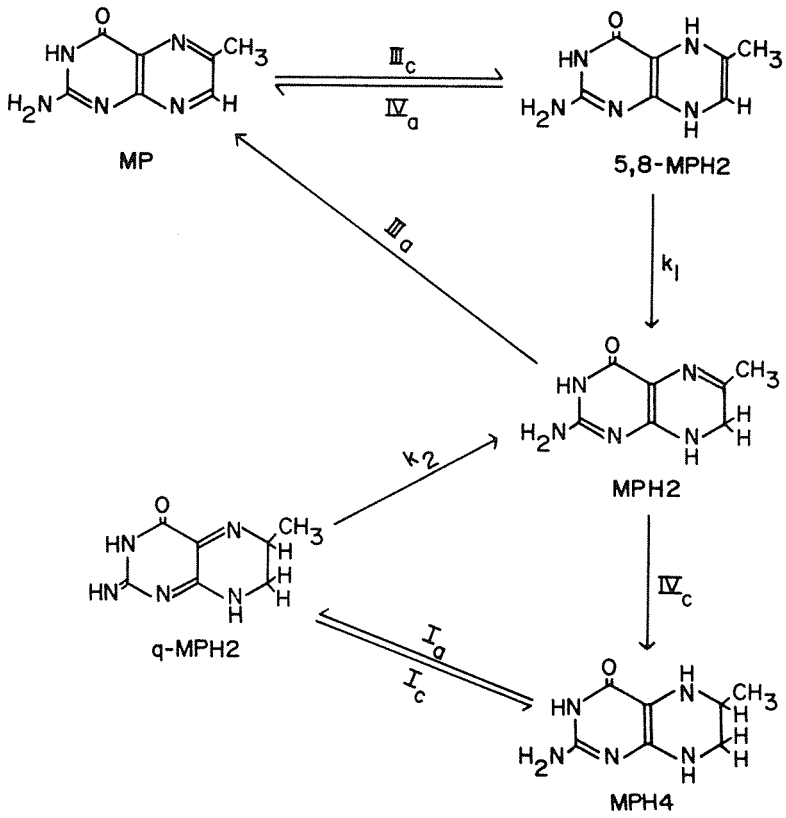
CV NOTES

6-METHLYPTERIN





SAMPLE:	6-Methylpterin
MEDIUM:	0.1 M Sodium Phosphate, pH 2.5
CONC:	~1mM
RATE:	50 mV/s
ETRODE:	GC
REF:	Ag/AgCl
MODEL:	BAS-100

The heterocyclic pterins are suspected to be regulators in neurotransmitter metabolism. Their ability to serve as enzyme cofactors is related to their unique electrochemistry.

The fully oxidized form of 6-methylpterin (MP) is reversibly reduced (waves III_c/IV_a) to 5,8-dihydro-6-methylpterin. This species rapidly tautomerizes to 7,8-dihydro-6-methylpterin (MPH2). MPH2 can either be oxidized to MP, (wave III_a) or be further reduced to 5,6,7,8-tetrahydro-6-methylpterin (MPH4, wave IV_c). MPH4 undergoes reversible oxidation to quinonoid dihydro-6-methylpterin (qMPH2, waves I_a/I_c). qMPH2 also tautomerizes to MPH2.

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