Supporting Information for Rearrangements of Radical Ions: What it Means to be Both a Radical and an Ion

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Table S1. Rate constants for homogeneous electron transfer (k_1) between the reduced form of the mediator ($\mathbf{M}^{\bullet-}$) and substrate **1** (0.5 M $^{n}Bu_4NClO_4$ supporting electrolyte; DMF solvent)

		1a		**1b**	
Mediator	$E^{o}_{M/M\bullet-}$ (V)[a]	k_1 ($M^{-1}s^{-1}$)	ρ[b]	k_1 ($M^{-1}s^{-1}$)	ρ[b]
naphthalene	-2.901	4.2 (± 0.2) x 10^2	0.60	5.9 (± 0.2) x 10^2	0.45
3,6-dimethylphenanthrene	-2.937	1.3 (± 0.1) x 10^3	1.00	8.1 (± 0.6) x 10^2	0.90
1,3-dimethylnaphthalene	-2.971	3.5 (± 0.2) x 10^3	0.95	2.2 (± 0.1) x 10^3	0.55
biphenyl	-2.977	2.1 (± 0.1) x 10^3	0.95	2.4 (± 0.2) x 10^3	0.65
methoxynaphthalene	-2.988	5.2 (± 0.2) x 10^3	1.00	2.8 (± 0.2) x 10^3	0.80
2,7-dimethoxynaphthalene	-3.027	9.6 (± 0.3) x 10^3	1.00	8.0 (± 0.3) x 10^3	0.30
o-methoxybiphenyl	-3.086	3.4 (± 0.1) x 10^4	0.95	3.6 (± 0.1) x 10^4	0.50

[a] vs. 0.1 M $AgNO_3$/Ag. [b] (± 0.05) for all ρ