SUPPLEMENTARY MATERIAL

N-Acylethanolamines as Novel Alcohol Dehydrogenase 5 Substrates

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Table S1. Longer Acyl Chain NAEs as ADH3 Substrates^a

Substrate	R N OH	Relative Rates
N-Decanoylethanolamine	$R = CH_3(CH_2)_8$	1.0
N-Lauroylethanolamine	$R = CH_3(CH_2)_{10}$	0.57
N-Myristoylethanolamine	$R = CH_3(CH_2)_{12}$	0.061
N-Oleoylethanolamine	$R = CH_3(CH_2)_7HC = CH(CH)_7$	0.28
N-Linoleoylethanolamine	R = CH3(CH2)7HC=CHCH2HC=CH(CH)4	0.26
<i>N</i> -Arachidonoylethanolamine	$R = CH_3(CH_2)_3HC = CHCH_2HC = CHCH_2HC = CH(CH)_4$	0.24

 $^{^{}a}$ The substrate concentration was fixed at 55 μM for all NAE substrates included in Table S1. The initial rate obtained using 55 mM N-decanoylethanolamine was 0.091 units/mg.

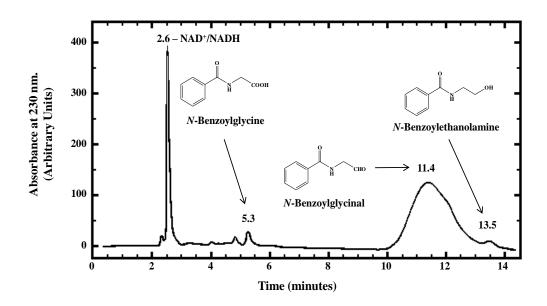


Figure S1. HPLC Analysis of Non-enzymatic *N*-benzoylglycinal Dismutation.

N-Benzoylglycinal (4 mM) was incubated with 100 mM sodium pyrophosphate (pH 9.5) and 2.5 mM NAD⁺ at 37 °C. The sample was analyzed after 30 min of incubation time.