## GGE oxidation

LigLLigNLigDSubstrateGGEGGEDirectionoxidationoxidationKcat0.120.300.2
Direction oxidation oxidation
Kcat   0.12   0.30   0.2
(1/sec) HO OH
Km (M)  5.5e-4 7.9e-5 7.3e-5 + NAD+
<u> </u>
I OH

## G-diketone reduction

G diketone i	caaction				но
	LigL	LigN	LigD		
Kcat	1.44	0.1	0.02	+ NADH	+ NAD+
(1/sec)					
Km (M)	3.4e-3	3.1e-4	4.1e-4		
				<b>→</b> ~	<b>→</b> ~
				ОН	ОН

## Threo-GD oxidation

	LigL	LigN	LigD
Kcat	0.03	NA	NA
(1/sec)			
Km (M)	1.53e-3	NA	NA