Supporting Information

S 1. Means of the three experiments (data are $\mathrm{n}=3$, except for open square: $\mathrm{n}=1$; concentrations of $\mathbf{1}$ used were between 4.9 and $49 \mu \mathrm{M}$ ). The concentration of the enzyme (HP-TrxR) was 460 nM


S 2. One of the three experiments shown in S 1.

$[1]^{-1}(1 / \mu M)$

Calculation according to S 1
( Km and Vmax from means of all single data points)

|  | $\mathrm{Km} / \mathrm{Vmax}$ | 1,1513 |
| ---: | ---: | :---: |
| $1 / \mathrm{Vmax}($ at $\mathrm{x}=0)$ | 0,0721 |  |
| $(-) 1 / \mathrm{Km}($ at $\mathrm{y}=0)$ | $-0,062625$ |  |
|  |  |  |
| $\mathrm{Km}(\mu \mathrm{M})$ | 15,97 |  |
| $\operatorname{Vmax}(\mu \mathrm{M} / \mathrm{min})$ | 13,87 |  |

## Calculation according to S 2: (Reported in the main text)

(means of all single Km and Vmax values:)

| $\mathbf{K m}(\boldsymbol{\mu M})$ | means | SD |
| :---: | :---: | :---: |
| 13,82 | 17,52 | 5,72 |
| 13,14 |  |  |
| 25,61 |  |  |
|  |  |  |
| Vmax $(\boldsymbol{\mu M} / \mathbf{m i n})$ | means | SD |
| 14,58 | 14,78 | 2,57 |
| 11,73 |  |  |
| 18,02 |  |  |

