

## Corrigendum

Corrigendum to: **Distinct mechanisms of antibody-mediated enzymatic reactivation in  $\beta$ -galactosidase molecular sensors**[*FEBS Letters* 438 (1998) 267–271]<sup>1</sup>

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The authors had previously explored the reactivation mechanisms of three  $\beta$ -galactosidase-based enzymatic sensors, namely M278VP1, JX772A and JX795A. However, cross-contamination between the JX772A and JX795A protein stocks used for this purpose has since been noticed. After a carefully repeated analysis of new pure protein stocks, the authors have

observed a very poor reactivation of JX772A upon antibody binding (within the experimental background) and have also determined new parameters for JX7795A, this enzyme clearly belonging to the class II sensors. These data are given in corrected Tables 1 and 2.

Table 1  
Enzymatic properties of recombinant proteins with or without antibodies

Protein	Without antibody			With antibody		
	$K_m$ (mM)	$k_{cat}$ (s <sup>-1</sup> )	$k_{cat}/K_m$ (mM s <sup>-1</sup> )	$K_m$ (mM)	$k_{cat}$ (s <sup>-1</sup> )	$k_{cat}/K_m$ (mM s <sup>-1</sup> )
M278VP1	0.3100 ± 0.0970 <sup>a</sup>	1 496 ± 173	4 825 ± 1 610	0.1384 ± 0.0165	1 357 ± 54	9 805 ± 1 232
JX795A	0.1065 ± 0.0258	2 640 ± 158	24 800 ± 4 215	0.1075 ± 0.0101	5 410 ± 196	50 325 ± 4 502

<sup>a</sup>Standard deviation values.

Table 2  
Features of  $\beta$ -galactosidase molecular sensors

Protein	Sensor properties								
	Specific activity (U/ $\mu$ g)	Reactivation factor <sup>b</sup>	$K_m$ variation factor <sup>b</sup>	$k_{cat}$ variation factor <sup>b</sup>	Responsiveness to mAb 3E5	Responsiveness to Fab 3E5	Distances between insertions (Å) <sup>c</sup>	Distances to active sites (Å) <sup>d</sup>	Class
M278VP1	170 ± 43 <sup>a</sup>	2.0	0.46	0.90	yes	no	51/58/55	49/19	I
JX795A	675 ± 102	1.8	1.00	2.01	yes	yes	74/91/57	15/56	II

<sup>a</sup>Standard deviation values.

<sup>b</sup>Reactivation was induced by immune guinea-pig serum at a 1:10 dilution.

<sup>c</sup>Clockwise atomic distances between one insertion site and the remaining three of the assembled tetramer. The C $\alpha$  of residues 278 and 795 have been taken as references for determination.

<sup>d</sup>Distances between the residues indicated in <sup>c</sup> and either the active site of the same monomer or the one sharing the activating interface. C $\alpha$  of Glu<sub>461</sub>, which is involved in the catalytic centre [29], has been used as reference.

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