

Figure 2 - source data 3:

Quantitative time-resolved analysis reveals intricate, differential  
regulation of standard and immuno-proteasomes.

Juliane Liepe, Hermann-Georg Holzhütter, Elena Bellavista, Peter M. Klotzel,  
Michael P. H. Stumpf, Michele Mishto

Table 1: List of mathematical model species

peptide-bond hydrolysis	
$E_0$	initial proteasome concentration
$S$	substrate inside the chamber
$P$	product inside the chamber
transport	
$S_{out}$	substrate outside the chamber
$P_{out}$	product outside the chamber
$G_1$	proteasome gate for influx
$G_2$	proteasome gate for efflux
$[G_1 S_{out}]$	substrate bound to proteasome gate for influx
$[G_1 P_{out}]$	product bound to proteasome gate for influx
$[G_2 S]$	substrate bound to proteasome gate for efflux
$[G_2 P]$	product bound to proteasome gate for efflux
transport regulation	
$E_{reg}$	enhancing regulator site
$[E_{reg} S_{out}]$	substrate bound to enhancing regulator site outside the chamber
$[E_{reg} P_{out}]$	product bound to enhancing regulator site outside the chamber
$[E_{reg} S]$	substrate bound to enhancing regulator site inside the chamber
$[E_{reg} P]$	product bound to enhancing regulator site inside the chamber
$I_0$	initial concentration of inhibiting regulator site outside the chamber
$I_{free}$	inhibiting regulator site outside the chamber
$[IS]$	substrate bound to inhibiting regulator site outside the chamber
$[IP]$	product bound to inhibiting regulator site outside the chamber