

Supplemental table 1: Peroxisomal localization of monomeric eqFP611 variants with different C-terminal sequences in HEK293 cells.

C-terminal sequence	Peroxisomal localization ^a	
	24 h posttransfection	48 h posttransfection
-216HAVAKFCDLPSKLGRL231 ^b	++++++	++++++
-216HAVAK HSGL L225 ^c	+++++ -	+++++ -
-216HAVAK HSGL L224 ^c	+++ - - -	+++ - - -
-216HAVAKF AGL L224 ^c	- - - - -	++ - - - -
-216HA EAQFSG L225 ^c	- - - - -	+ - - - - -
-216HAVAK HSG 223 ^c	- - - - -	- - - - -
-216HAVAK HSGGG 225 ^c	- - - - -	- - - - -
-216HA EAQFSG 223 ^c	- - - - -	- - - - -
216HAVAKFCDL224	- - - - -	- - - - -
-216HAVAKF AGGG 225 ^c	- - - - -	- - - - -
-216HAVAKF AGLGGG 227 ^{c, d}	- - - - -	- - - - -

^a Rating based on the co-localization with EGFP-SKL from complete (++++++) to absent (- - - - -)

^b C-terminal sequence of wild-type eqFP611

^c Residues deviating from the C-terminal sequence of wild-type eqFP611 are highlighted in red.

^d C-terminal sequence of mRuby