

Table S7. Differences in size of effects on GUS activity between W232 substitution variants co-delivered with targets with 0th position A, C, or G, and the same TAL effector co-delivered with the target with 0th position T, used to determine specificity for the 0th position.

Treatment A	Treatment B	Estimate ¹	SE ²	Z-statistic ³	p-value ⁴
EBE_868-A + TAL868	EBE_868-T + TAL868	-39.0658	26.2165	-1.4901	0.1362
EBE_868-C + TAL868	EBE_868-T + TAL868	-72.8951	26.2165	-2.7805	0.0054
EBE_868-G + TAL868	EBE_868-T + TAL868	-71.5824	27.6766	-2.5864	0.0097
EBE_868-A + TAL868 W232N	EBE_868-T + TAL868 W232N	-17.4261	37.9669	-0.459	0.6462
EBE_868-C + TAL868 W232N	EBE_868-T + TAL868 W232N	-37.1038	37.9669	-0.9773	0.3284
EBE_868-G + TAL868 W232N	EBE_868-T + TAL868 W232N	-17.2847	37.9669	-0.4553	0.6489
EBE_868-A + TAL868 W232P	EBE_868-T + TAL868 W232P	7.4455	30.9998	0.2402	0.8102
EBE_868-C + TAL868 W232P	EBE_868-T + TAL868 W232P	1.4639	30.9998	0.0472	0.9623
EBE_868-G + TAL868 W232P	EBE_868-T + TAL868 W232P	12.0584	31.5832	0.3818	0.7026
EBE_868-A + TAL868 W232Q	EBE_868-T + TAL868 W232Q	-27.5133	30.9998	-0.8875	0.3748
EBE_868-C + TAL868 W232Q	EBE_868-T + TAL868 W232Q	-45.9583	30.9998	-1.4825	0.1382
EBE_868-G + TAL868 W232Q	EBE_868-T + TAL868 W232Q	-10.6222	30.9998	-0.3427	0.7319
EBE_868-A + TAL868 W232R	EBE_868-T + TAL868 W232R	-12.7718	26.8466	-0.4757	0.6343
EBE_868-C + TAL868 W232R	EBE_868-T + TAL868 W232R	-19.5424	26.8466	-0.7279	0.4667
EBE_868-G +	EBE_868-T +	-5.4043	26.8466	-0.2013	0.8405

TAL868 W232R	TAL868 W232R				
EBE_868-A + TAL868 W232T	EBE_868-T + TAL868 W232T	-1.9085	30.9998	-0.0616	0.9509
EBE_868-C + TAL868 W232T	EBE_868-T + TAL868 W232T	-30.5213	30.9998	-0.9846	0.3248
EBE_868-G + TAL868 W232T	EBE_868-T + TAL868 W232T	-25.0901	30.9998	-0.8094	0.4183
EBE_PthXo1-A + PthXo1	EBE_PthXo1-T + PthXo1	-10.56	19.0896	-0.5532	0.5801
EBE_PthXo1-C + PthXo1	EBE_PthXo1-T + PthXo1	-26.1776	19.0896	-1.3713	0.1703
EBE_PthXo1-G + PthXo1	EBE_PthXo1-T + PthXo1	-20.0229	19.0896	-1.0489	0.2942
EBE_PthXo1-A + PthXo1 W232N	EBE_PthXo1-T + PthXo1 W232N	-6.1063	27.2481	-0.2241	0.8227
EBE_PthXo1-C + PthXo1 W232N	EBE_PthXo1-T + PthXo1 W232N	-8.2945	27.2235	-0.3047	0.7606
EBE_PthXo1-G + PthXo1 W232N	EBE_PthXo1-T + PthXo1 W232N	24.6582	27.2235	0.9058	0.3651
EBE_PthXo1-A + PthXo1 W232P	EBE_PthXo1-T + PthXo1 W232P	26.1908	21.5637	1.2146	0.2245
EBE_PthXo1-C + PthXo1 W232P	EBE_PthXo1-T + PthXo1 W232P	37.3488	21.5637	1.732	0.0833
EBE_PthXo1-G + PthXo1 W232P	EBE_PthXo1-T + PthXo1 W232P	35.6093	21.5637	1.6513	0.0987
EBE_PthXo1-A + PthXo1 W232Q	EBE_PthXo1-T + PthXo1 W232Q	10.9427	26.8466	0.4076	0.6836
EBE_PthXo1-C + PthXo1 W232Q	EBE_PthXo1-T + PthXo1 W232Q	13.3468	26.8466	0.4971	0.6191
EBE_PthXo1-G + PthXo1 W232Q	EBE_PthXo1-T + PthXo1 W232Q	94.0353	26.8466	3.5027	0.0005
EBE_PthXo1-A + PthXo1 W232R	EBE_PthXo1-T + PthXo1 W232R	67.5683	30.9998	2.1796	0.0293
EBE_PthXo1-C +	EBE_PthXo1-T +	39.9221	30.9998	1.2878	0.1978

PthXo1 W232R	PthXo1 W232R				
EBE_PthXo1-G + PthXo1 W232R	EBE_PthXo1-T + PthXo1 W232R	1.1782	30.9998	0.038	0.9697
EBE_PthXo1-A + PthXo1 W232T	EBE_PthXo1-T + PthXo1 W232T	11.1258	21.4063	0.5197	0.6032
EBE_PthXo1-C + PthXo1 W232T	EBE_PthXo1-T + PthXo1 W232T	6.3498	21.4063	0.2966	0.7667
EBE_PthXo1-G + PthXo1 W232T	EBE_PthXo1-T + PthXo1 W232T	17.8609	21.4063	0.8344	0.4041

¹ Estimated difference between the effect sizes of Treatment A and Treatment B on GUS activity. Estimate<0 indicates the Treatment A has a smaller effect on GUS activity than treatment B. Estimate>0 indicates that Treatment A has a larger effect on GUS activity than Treatment B.

² Standard Error for the estimated difference in effect sizes computed by the general linear hypothesis test.

³ Z statistic For the general linear hypothesis test of the null hypothesis that the expected value of the effect size of Treatment A is equal to the expected value of the effect size of Treatment B.

⁴ p-value for the general linear hypothesis test of the null hypothesis that the expected value of the effect size of Treatment A is equal to the expected value of the effect size of Treatment B.