

S3 Table. Classification of the effect amino acids at position $X_{(-2)}$, $X_{(-1)}$ and $X_{(+1)}$ exert on ribosomal stalling strength.

Reference: [1]

Effect on stalling strength	Amino acid at position $X_{(-2)}$	Amino acid at position $X_{(-1)}$		Amino acid at position $X_{(+1)}$
Strong	A, E, H, I, K, P, R, V	D, G, P	PP	D, E, K, N, P, S, W
Moderate	D, G, N, Q, Y	A	PP	A, G, Q,
Weak	C, F, L, M, T, S	C, E, F, H, I, K, L, M, N, Q, R, S, T, V, W, Y	PP	C, F, H, I, L, M, R, T, V, Y

Reference: [2,3]

Effect on stalling strength	Amino acid at position $X_{(-2)}$	Amino acid at position $X_{(-1)}$		Amino acid at position $X_{(+1)}$
Strong	D, E, H, K, P, Q, R, Y, W	A, D, P	PP	D, G, N, P, W
Moderate	F, G, I, M, N, V	E, G, S	PP	E, Q, S, T
Weak	A, C, L, S, T	C, F, H, I, K, L, M, N, Q, R, T, V, W, Y	PP	A, C, F, H, I, K, L, M, R, V, Y

Combined data

Effect on stalling strength	Amino acid at position $X_{(-2)}$	Amino acid at position $X_{(-1)}$		Amino acid at position $X_{(+1)}$
strong	A, D, E, G, H, I, K, P, Q, R, V, W, Y	A, D, G, (P)	nP	D, E, G, N, (P), S, W
Moderate	F, M, N	S, E	nP	A, K, Q, T
Weak	C, L, S, T	C, F, H, I, K, L, M, N, Q, R, T, V, W, Y	nP	C, F, H, I, L, M, R, V, Y

Reference

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3. Starosta AL, Lassak J, Peil L, Atkinson GC, Virumäe K, Tenson T, et al. Translational stalling at polyproline stretches is modulated by the sequence context upstream of the stall site. *Nucleic Acids Res*. 2014;42: 10711–9. doi:10.1093/nar/gku768