S2 Table: Specific activity of BiuH and its variants. The specific activity was measured in presence of 1.2 mM of biuret (n=3) in µmoles.sec^{-1}.mg enzyme^{-1}, Tm: melting temperature measured by differential scanning fluorimetry in °C (n=3-16 depending on the variants).

	Specific activity	**Tm (°C)**
BiuH WT	51.02 ± 9.670	58.0 ± 0.45
Asp36Ala	0.05 ± 0.012	53.3 ± 0.16
Asp36Asn	0.03 ± 0.006	46.6 ± 0.05
Asp36Gln	0.05 ± 0.009	45.9 ± 0.09
Asp36Glu	0.04 ± 0.087	41.3 ± 0.07
Phe41Ala	1.79 ± 0.033	47.8 ± 0.31
Phe41Leu	6.28 ± 0.057	54.4 ± 0.41
Phe41Tyr	15.33 ± 0.068	59.7 ± 0.07
Phe41Trp	6.84 ± 0.082	51.9 ± 0.24
Lys142Ala	0.04 ± 0.015	64.3 ± 2.21
Lys142His	0.05 ± 0.009	67.8 ± 0.08
Lys142Arg	2.75 ± 0.466	45.8 ± 0.22
Lys145Ala	0.23 ± 0.004	53.1 ± 0.31
Lys145His	0.55 ± 0.074	54.5± 1.13
Lys145Arg	0.34 ± 0.04	47.5 ± 0.19
Cys175Ala	0.04 ± 0.032	61.0 ± 0.73
Cys175Ser	0.05 ± 0.011	64.5 ± 0.15
Gln215Ala	2.22 ± 0.22	51.7 ± 0.24
Gln215Asn	1.92 ± 0.08	51.9 ± 0.13
Gln215Asp	0.22 ± 0.007	52.2 ± 0.24
Gln215Glu	0.87 ± 0.081	56.0 ± 0.51