

# Hydrophobicity scales – from measurements using AcWL-X-LL peptides

## Whole-Residue Hydrophobicity Scales

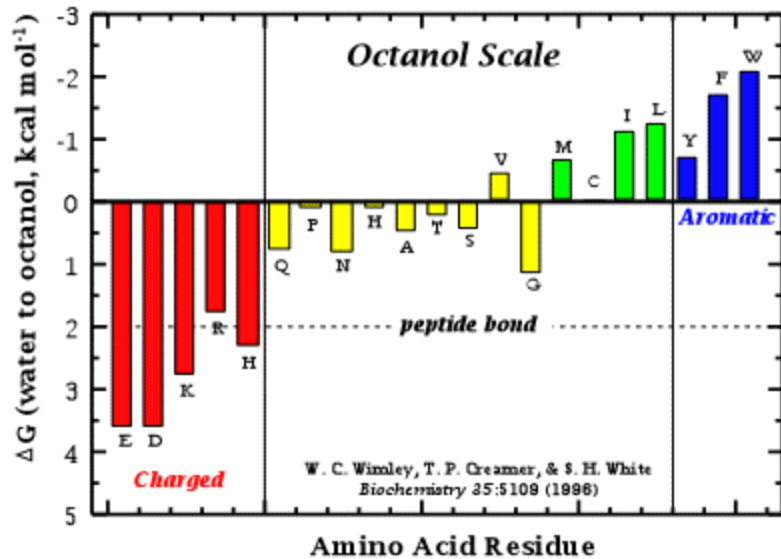
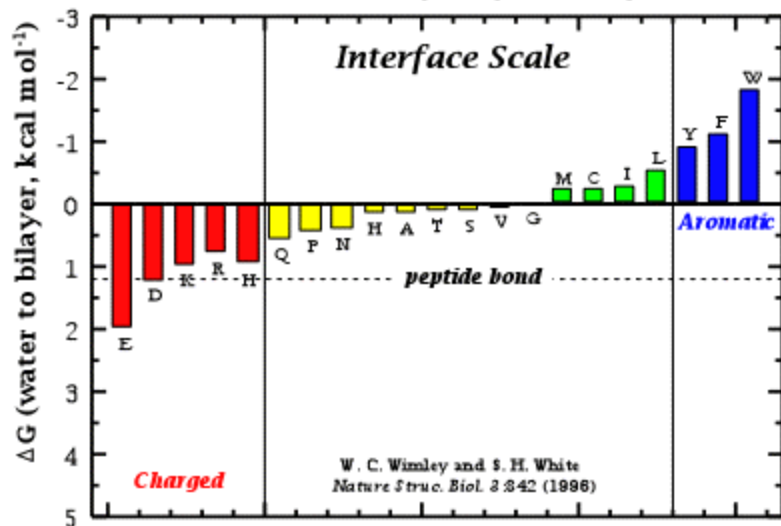


Table 1. [Whole-Residue Hydrophobicity Scales](#) showing the free energies of transfer  $\Delta G$  (kcal/mol) from water to POPC interface (*wif*) and to *n*-octanol (*woct*).

Amino Acid	Interface Scale $\Delta G_{wif}$ (kcal/mol)	Octanol Scale $\Delta G_{woct}$ (kcal/mol)	Octanol – Interface Scale
Ala	0.17 ± 0.06	0.50 ± 0.12	0.33 ± 0.12
Arg <sup>+</sup>	0.81 ± 0.11	1.81 ± 0.13	1.00 ± 0.17
Asn	0.42 ± 0.06	0.85 ± 0.12	0.43 ± 0.13
Asp <sup>-</sup>	1.23 ± 0.07	3.64 ± 0.17	2.41 ± 0.18
Asp <sup>0</sup>	-0.07 ± 0.11	0.43 ± 0.13	0.50 ± 0.17
Cys	-0.24 ± 0.06	-0.02 ± 0.13	0.22 ± 0.14
Gln	0.58 ± 0.08	0.77 ± 0.12	0.19 ± 0.14
Glu <sup>-</sup>	2.02 ± 0.11	3.63 ± 0.18	1.61 ± 0.21
Glu <sup>0</sup>	-0.01 ± 0.15	0.11 ± 0.12	0.12 ± 0.19
Gly	0.01 ± 0.05	1.15 ± 0.11	1.14 ± 0.12
His <sup>+</sup>	0.96 ± 0.12	2.33 ± 0.11	1.37 ± 0.16
His <sup>0</sup>	0.17 ± 0.06	0.11 ± 0.11	-0.06 ± 0.13
Ile	-0.31 ± 0.06	-1.12 ± 0.11	-0.81 ± 0.13
Leu	-0.56 ± 0.04	-1.25 ± 0.11	-0.69 ± 0.12
Lys <sup>+</sup>	0.99 ± 0.11	2.80 ± 0.11	1.81 ± 0.16
Met	-0.23 ± 0.06	-0.67 ± 0.11	-0.44 ± 0.13
Phe	-1.13 ± 0.05	-1.71 ± 0.11	-0.58 ± 0.12
Pro	0.45 ± 0.12	0.14 ± 0.11	-0.31 ± 0.16
Ser	0.13 ± 0.08	0.46 ± 0.11	0.33 ± 0.14
Thr	0.14 ± 0.06	0.25 ± 0.11	0.11 ± 0.13
Trp	-1.85 ± 0.06	-2.09 ± 0.11	-0.24 ± 0.13
Tyr	-0.94 ± 0.06	-0.71 ± 0.11	0.23 ± 0.13
Val	0.07 ± 0.05	-0.46 ± 0.11	-0.53 ± 0.12