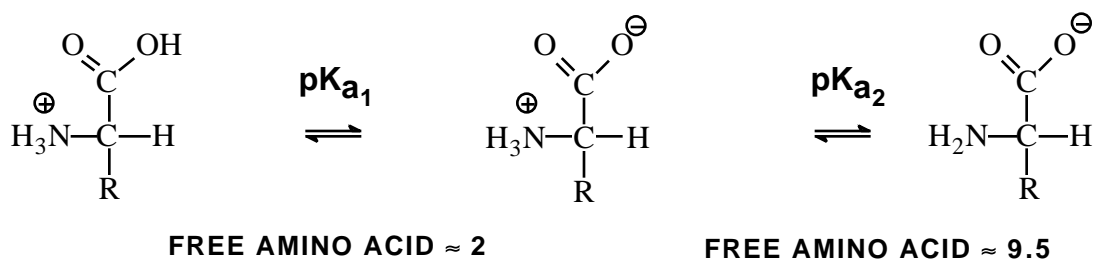


## AMINO ACID IONIZATION BEHAVIOR

(water not shown in equations for brevity)

### $\alpha$ CARBOXYL AND $\alpha$ AMINO GROUPS



### SIDE GROUPS

