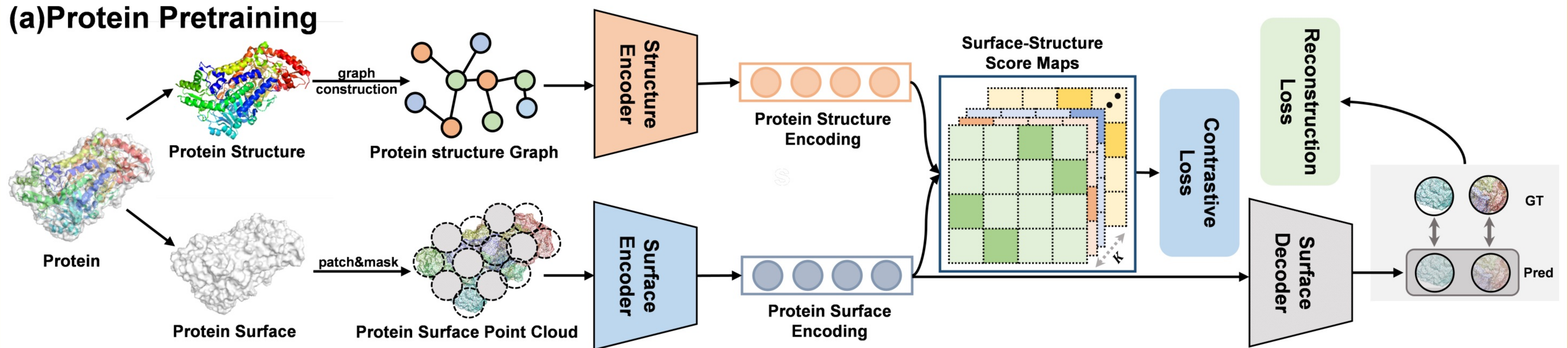
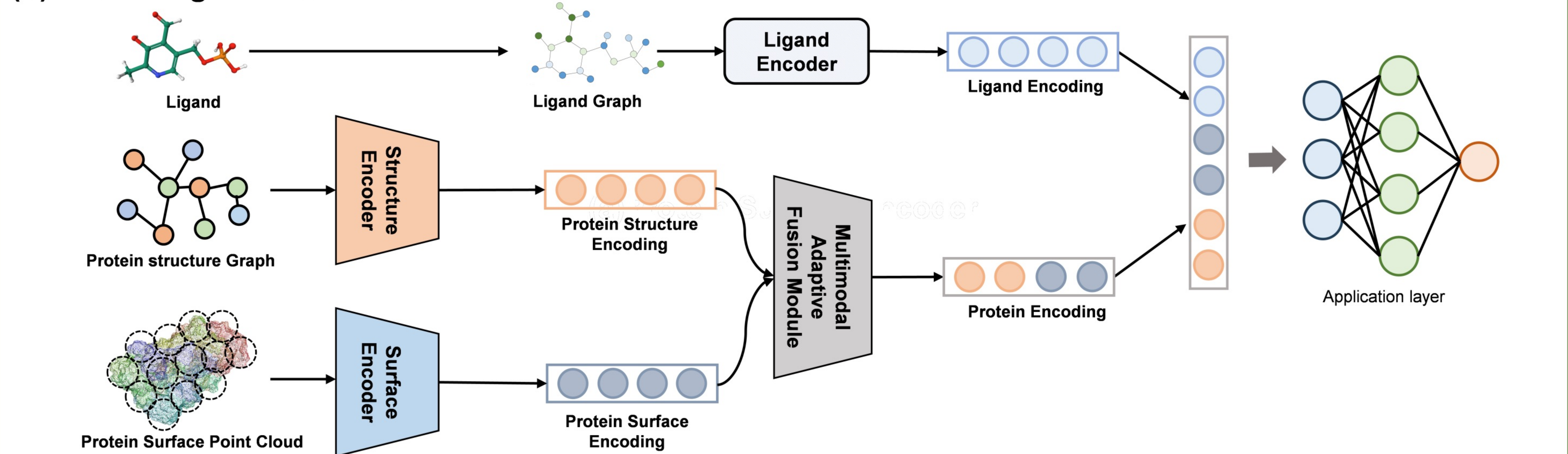


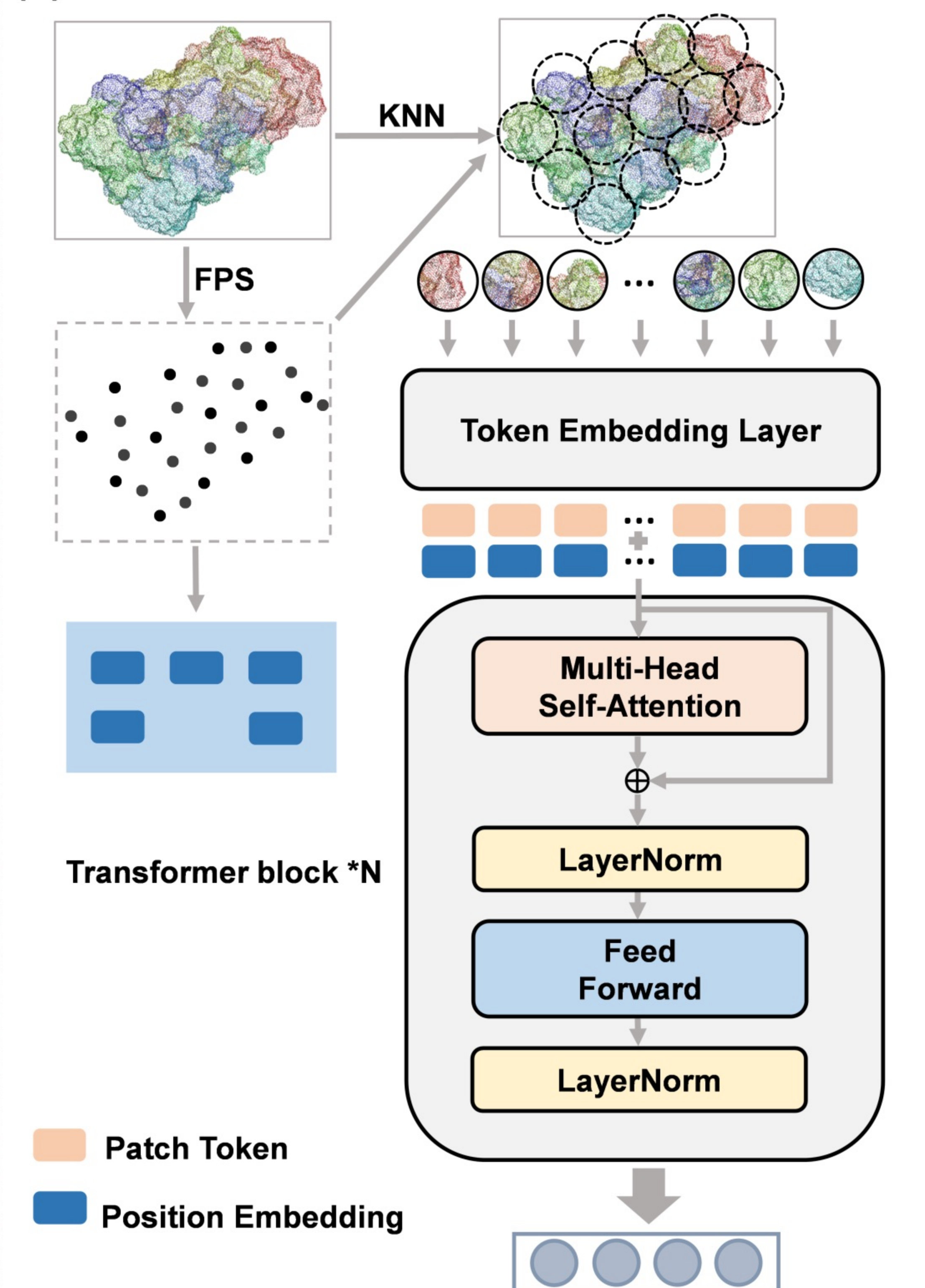
## (a) Protein Pretraining



## (b) Protein Ligand Interaction Prediction



## (c) Protein Surface Encoder



## (d) Token Embedding Layer

