

Amino acid group

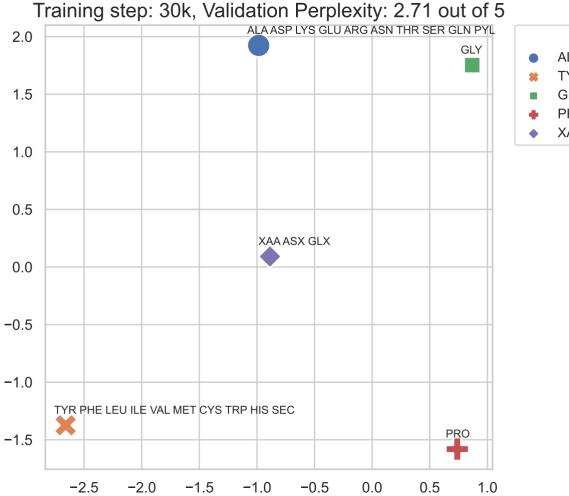
ALA ASP LYS GLU ARG ASN THR SER GLN PYL

TYR PHE LEU ILE VAL MET CYS TRP HIS SEC

GLY

PRO

AAAASY GLY



Amino acid group

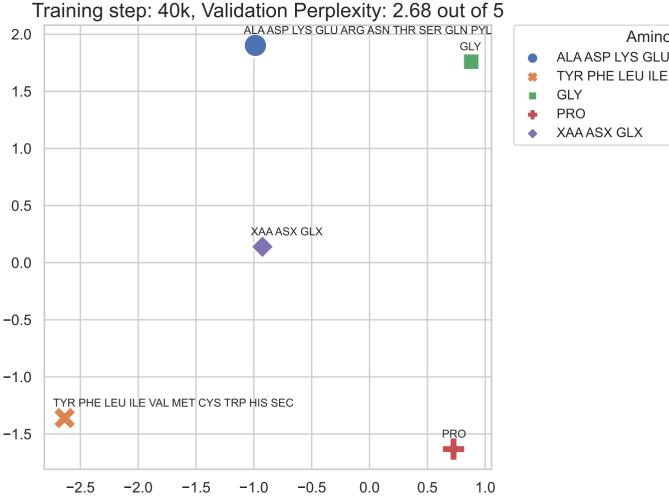
ALA ASP LYS GLU ARG ASN THR SER GLN PYL

TYR PHE LEU ILE VAL MET CYS TRP HIS SEC

GLY

PRO

XAA ASX GLX



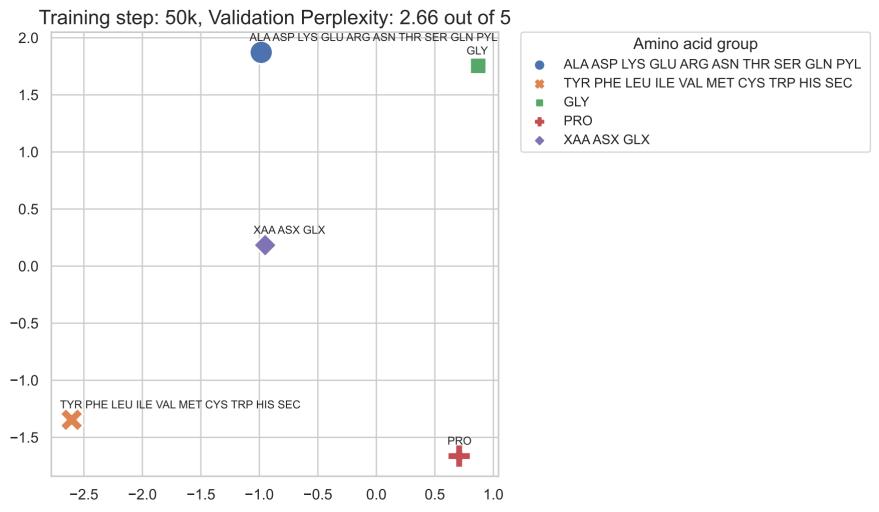
Amino acid group

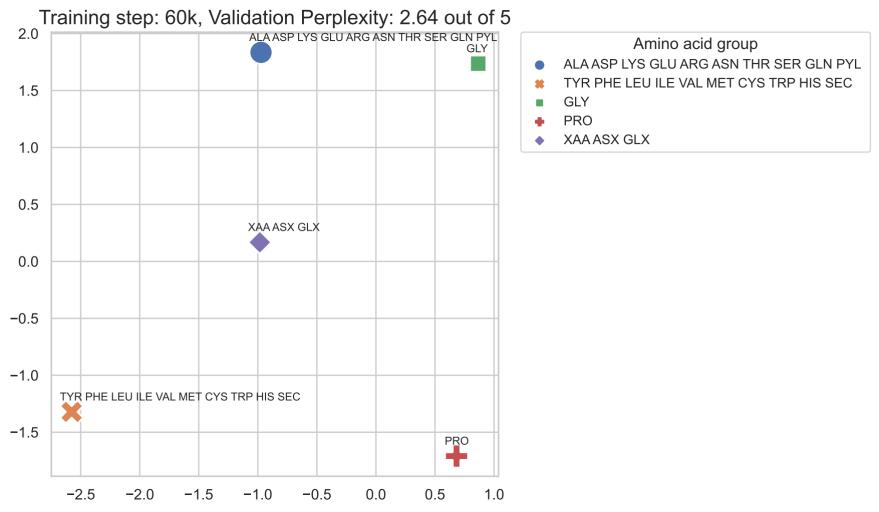
ALA ASP LYS GLU ARG ASN THR SER GLN PYL

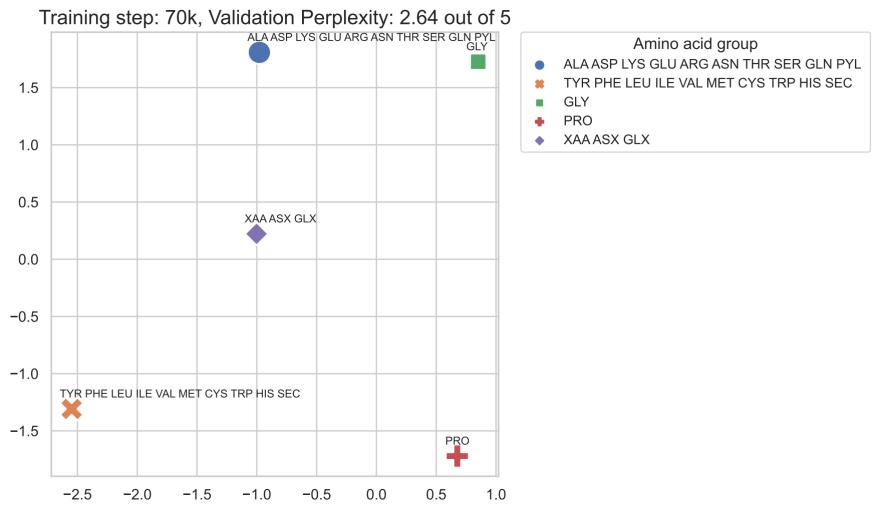
TYR PHE LEU ILE VAL MET CYS TRP HIS SEC

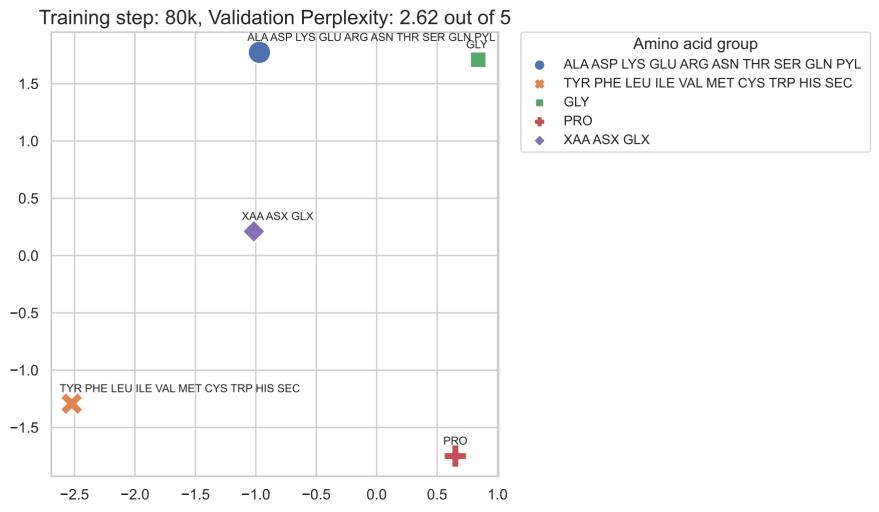
GLY

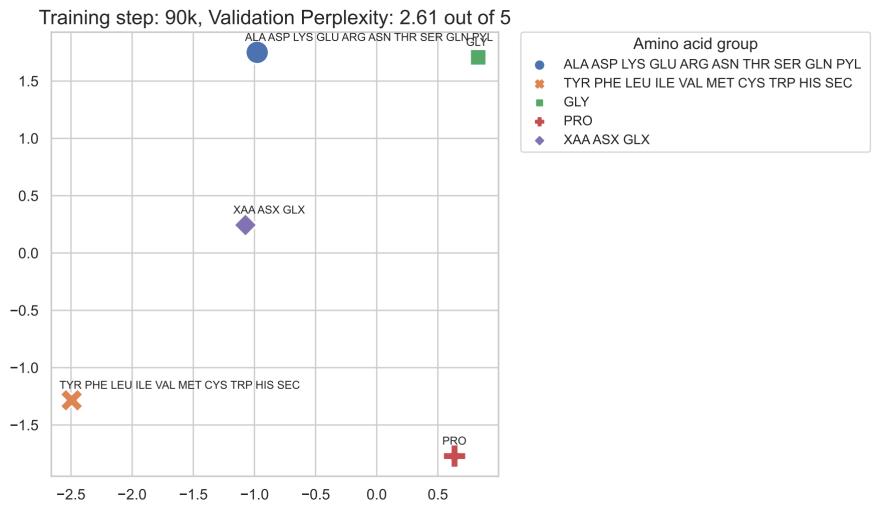
PRO

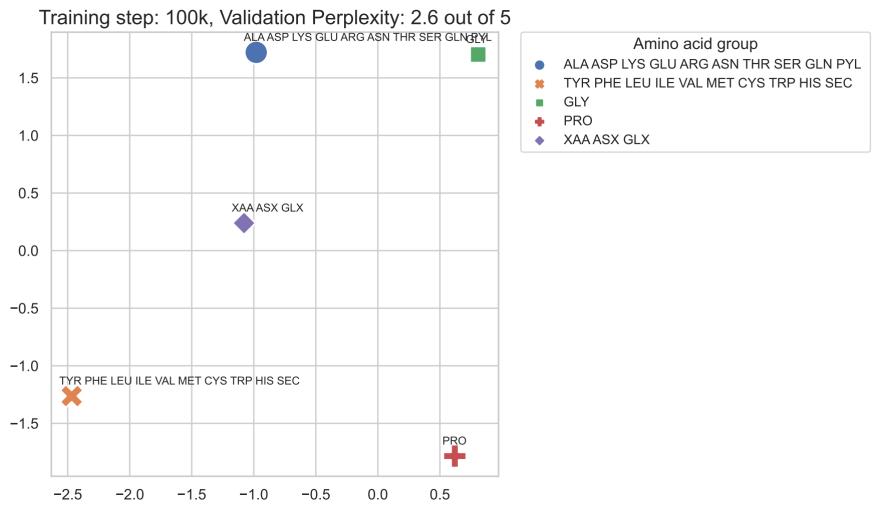


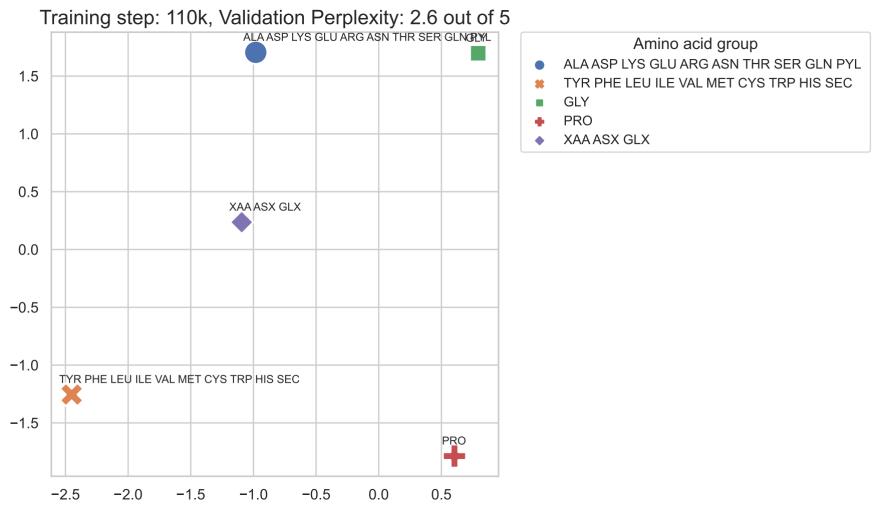












Training step: 120k, Validation Perplexity: 2.59 out of 5 ALA ASP LYS GLU ARG ASN THR SER GLNGRYL Amino acid group ALA ASP LYS GLU ARG ASN THR SER GLN PYL 1.5 TYR PHE LEU ILE VAL MET CYS TRP HIS SEC **GLY PRO** 1.0 XAA ASX GLX 0.5 XAA ASX GLX 0.0 -0.5-1.0TYR PHE LEU ILE VAL MET CYS TRP HIS SEC -1.50.5 -2.5-2.0-1.5-1.0-0.50.0

Training step: 130k, Validation Perplexity: 2.58 out of 5 ALA ASP LYS GLU ARG ASN THR SER GLNGLYL Amino acid group ALA ASP LYS GLU ARG ASN THR SER GLN PYL 1.5 TYR PHE LEU ILE VAL MET CYS TRP HIS SEC **GLY PRO** 1.0 XAA ASX GLX 0.5 XAA ASX GLX 0.0 -0.5-1.0TYR PHE LEU ILE VAL MET CYS TRP HIS SEC -1.5PRO 0.5 -2.5-2.0-1.5-1.0-0.50.0

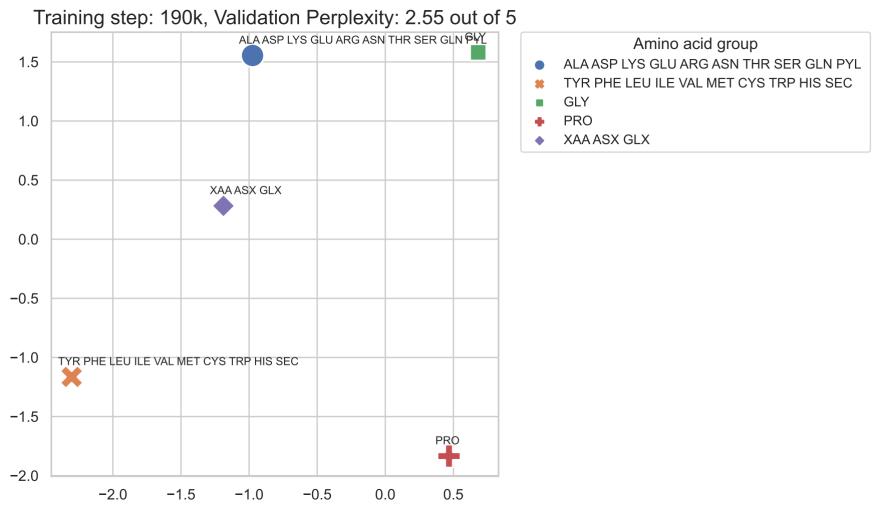
Training step: 140k, Validation Perplexity: 2.57 out of 5 ALA ASP LYS GLU ARG ASN THR SER GLN PLYL Amino acid group ALA ASP LYS GLU ARG ASN THR SER GLN PYL 1.5 TYR PHE LEU ILE VAL MET CYS TRP HIS SEC **GLY PRO** 1.0 XAA ASX GLX 0.5 XAA ASX GLX 0.0 -0.5-1.0TYR PHE LEU ILE VAL MET CYS TRP HIS SEC -1.5PRO 0.5 -2.5-2.0-1.5-1.0-0.50.0

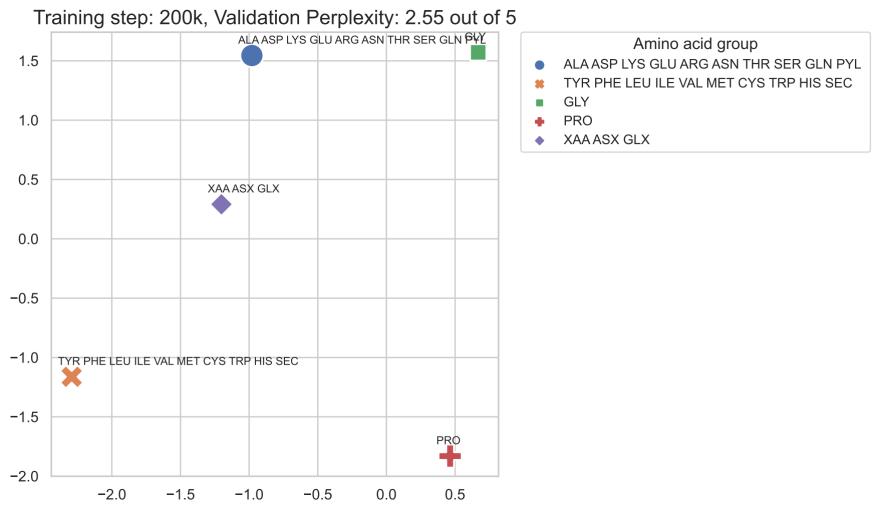
Training step: 150k, Validation Perplexity: 2.57 out of 5 ALA ASP LYS GLU ARG ASN THR SER GLN PLYL Amino acid group ALA ASP LYS GLU ARG ASN THR SER GLN PYL 1.5 TYR PHE LEU ILE VAL MET CYS TRP HIS SEC **GLY PRO** 1.0 XAA ASX GLX 0.5 XAA ASX GLX 0.0 -0.5-1.0TYR PHE LEU ILE VAL MET CYS TRP HIS SEC -1.5PRO -2.5-2.0-1.5-1.0-0.50.0 0.5

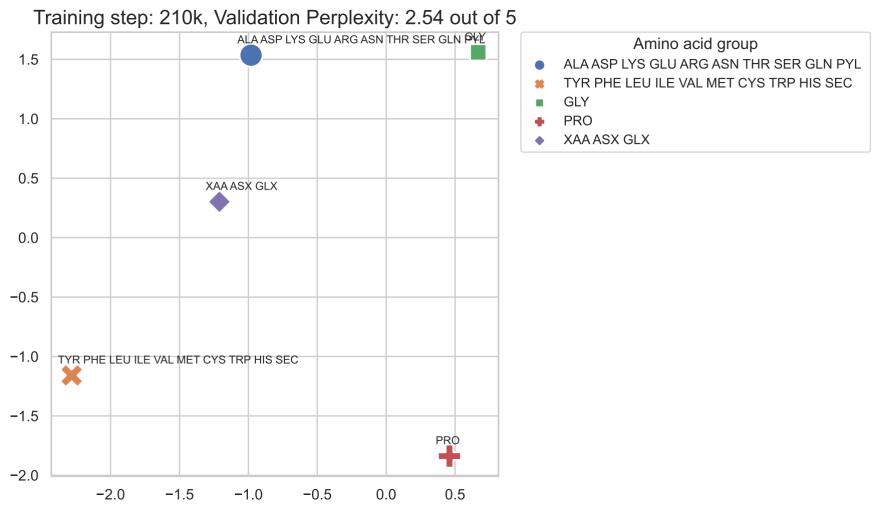
Training step: 160k, Validation Perplexity: 2.56 out of 5 ALA ASP LYS GLU ARG ASN THR SER GLN PLY Amino acid group ALA ASP LYS GLU ARG ASN THR SER GLN PYL 1.5 TYR PHE LEU ILE VAL MET CYS TRP HIS SEC **GLY PRO** 1.0 XAA ASX GLX 0.5 XAA ASX GLX 0.0 -0.5-1.0TYR PHE LEU ILE VAL MET CYS TRP HIS SEC -1.5PRO 0.5 -2.5-2.0-1.5-1.0-0.50.0

Training step: 170k, Validation Perplexity: 2.56 out of 5 ALA ASP LYS GLU ARG ASN THR SER GLN PYL Amino acid group 1.5 ALA ASP LYS GLU ARG ASN THR SER GLN PYL TYR PHE LEU ILE VAL MET CYS TRP HIS SEC **GLY PRO** 1.0 XAA ASX GLX 0.5 XAA ASX GLX 0.0 -0.5-1.0TYR PHE LEU ILE VAL MET CYS TRP HIS SEC -1.5PRO -2.00.5 -2.0-1.5-1.0-0.50.0

Training step: 180k, Validation Perplexity: 2.55 out of 5 ALA ASP LYS GLU ARG ASN THR SER GLN 64Y Amino acid group 1.5 ALA ASP LYS GLU ARG ASN THR SER GLN PYL TYR PHE LEU ILE VAL MET CYS TRP HIS SEC **GLY PRO** 1.0 XAA ASX GLX 0.5 XAA ASX GLX 0.0 -0.5-1.0TYR PHE LEU ILE VAL MET CYS TRP HIS SEC -1.5PRO -2.00.5 -2.0-1.5-1.0-0.50.0







Training step: 220k, Validation Perplexity: 2.54 out of 5 ALA ASP LYS GLU ARG ASN THR SER GLN PHY Amino acid group 1.5 ALA ASP LYS GLU ARG ASN THR SER GLN PYL TYR PHE LEU ILE VAL MET CYS TRP HIS SEC **GLY** 1.0 **PRO** XAA ASX GLX 0.5 XAA ASX GLX 0.0 -0.5-1.0TYR PHE LEU ILE VAL MET CYS TRP HIS SEC -1.5PRO 0.5 -2.0-1.5-1.0-0.50.0

