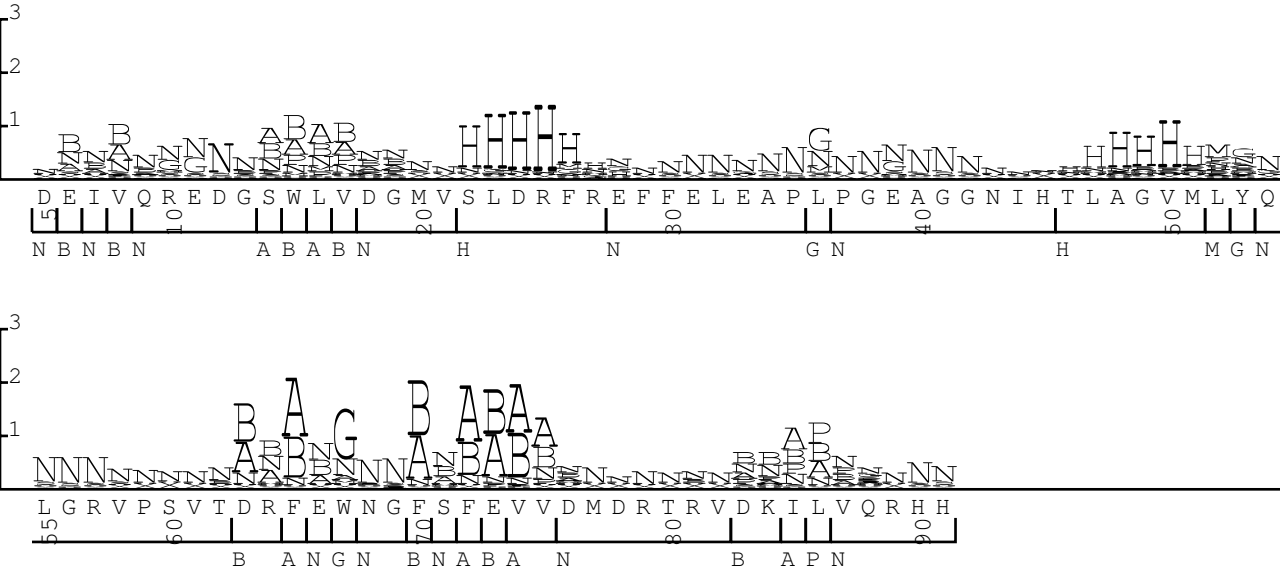TR453.t2k o_notor