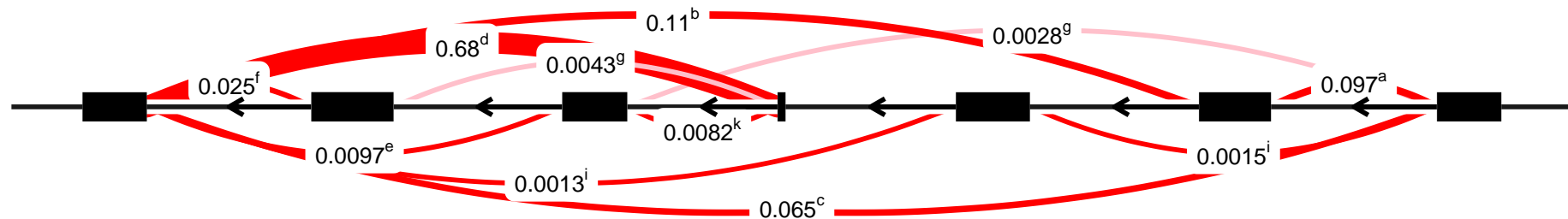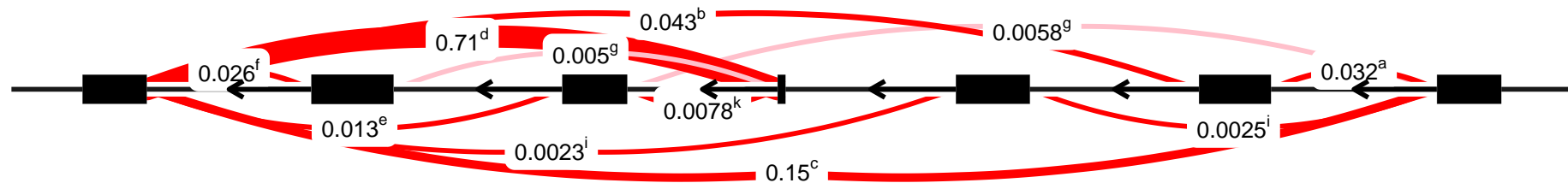NCALD_clu_14450_-_top_4.pdf