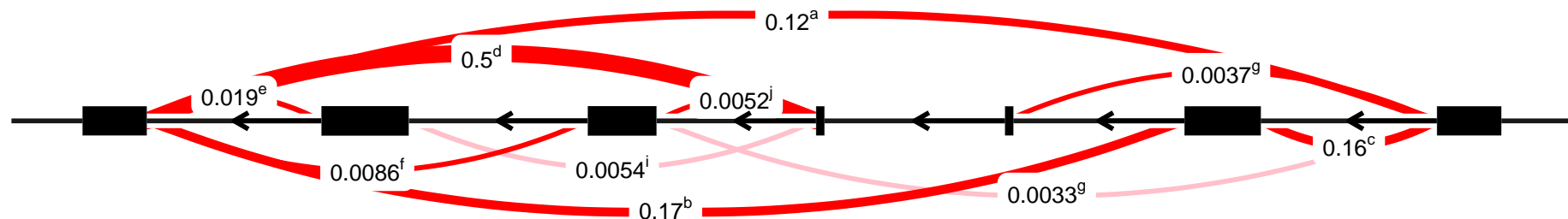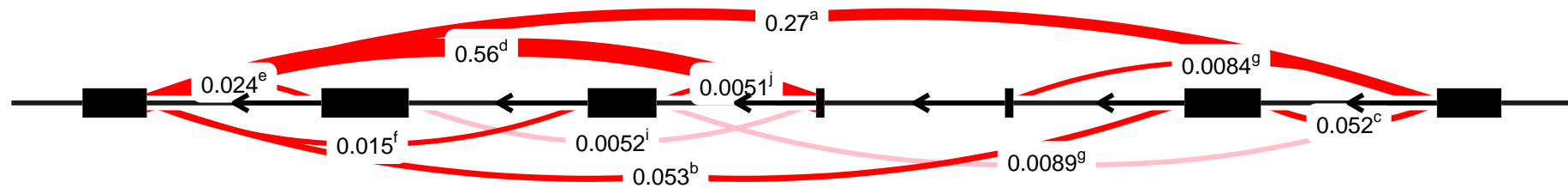NCALD_clu_15424_-_top_1.pdf