

**Table S2 Deletions leading to an Ahs- phenotype only in Sigma.**

YKR024C	YGR162W	YPL031C	YIR021W
YHR114W	YAL048C	YDL044C	YER161C
YML022W	YPL259C	YBR191W	YGR123C
YLR278C	YLR370C	YGR105W	YDL069C
YGL258W	YNL271C	YKL119C	YDR197W
YGR271C-A	YMR267W	YOR085W	YML024W
YML117W	YDR079W	YNR051C	YBR165W
YOR267C	YDR529C	YEL059C-A	YER154W
YMR044W	YPL132W	YPL086C	YLR384C
YOR213C	YLR204W	YPL024W	YDR074W
YMR127C	YLR315W	YILO08W	YHL034C
YCR009C	YER156C	YFR019W	YDR096W
YCR088W	YLR375W	YPL193W	YDL081C
YILO34C	YFR048W	YJL124C	YOL023W
YMR008C	YGL188C-A	YPR040W	YIL125W
YGR040W	YGL211W	YDR512C	YDR120C
YGL014W	YGL228W	YNL098C	YGR020C
YDR005C	YKL037W	YOL051W	YOR332W
YNL053W	YOR141C	YDR289C	YFL054C
YOR002W	YKL110C	YGR257C	YGR272C
YOR067C	YDR276C	YLL041C	YBR026C
YDL159W	YBL007C	YNL037C	YHR011W
YGL019W	YBR245C	YOR136W	YCR105W
YGR188C	YGR062C	YEL051W	YPR116W
YLR362W	YLR337C	YKL080W	YCR079W
YHR021C	YLR056W	YDL067C	YER014C-A
YPR043W	YGR014W	YLR295C	YLR390W-A
YBR189W	YGR037C	YBL099W	YGR229C
YGR232W	YHL038C	YDR298C	YDR359C
YER118C	YGL252C	YBL066C	YLR385C
YMR312W	YAL002W	YBR162C	YOL068C
YPL101W	YOR334W	YLR404W	YMR263W
YKL143W	YOL115W	YNL097C	YCR077C
YDR184C	YGL003C	YGR180C	YHR120W
YDL190C	YPL005W	YCR086W	YER061C
YEL060C	YDR140W	YDR129C	YHR067W
YDL005C	YAL023C	YML008C	YBL071W-A
YGL025C	YDR477W	YGL084C	YER014W

YEL065W
YOR198C
YPL055C
YDR393W
YHL020C
YGL246C
YER117W
YDL191W
YGL129C
YMR158W
YPL104W
YPR166C
YDR175C
YPL040C
YPL118W
YLR192C
YJL180C
YER017C
YMR089C
YNL121C
YPL148C
YILO49W
YNL119W
YHR084W
YHR111W
YIR019C
YFL026W
YNL180C
YDR194C
YKL149C
YKL194C
YPR163C
YBR127C
YMR293C
YKL055C
YOR221C
YPL271W
YDR332W
YOR305W

YBR163W
YER087W
YGL107C
YGR102C
YMR066W
YMR098C
YOR205C
YLR443W
YILO84C
YOR330C
YLR382C
YKL134C
YNL073W
YGR171C
YCR028C-A
YDR296W
YOL095C
YGL219C
YNL213C
YGR101W
YLL006W
YOL009C
YOR211C
YML062C
YLR435W
YDL090C
YBR146W
YBL038W
YBR251W
YBR268W
YBR282W
YCR003W
YCR024C
YCR046C
YCR071C
YDL045W-A
YDR237W
YDR322W
YDR347W

YDR405W
YER050C
YGR215W
YHR147C
YHR168W
YILO93C
YKL003C
YKL138C
YKL155C
YKL170W
YKR006C
YLR312W-A
YLR439W
YMR024W
YMR193W
YNL005C
YNL081C
YNL252C
YPL173W
YPR047W
YBL090W
YDR115W
YDR337W
YEL050C
YGL143C
YGR165W
YGR220C
YHR091C
YJL063C
YKR085C
YLR139C
YMR097C
YNL177C
YOR150W
YPR100W
YPL002C
YBL022C
YBR083W
YGL064C

YMR287C
YPL029W
YML055W
YLL033W
YMR228W
YJL102W
YLR069C
YOR187W
YDR470C
YDR268W
YPL097W
YPL019C
YGR219W
YAL004W