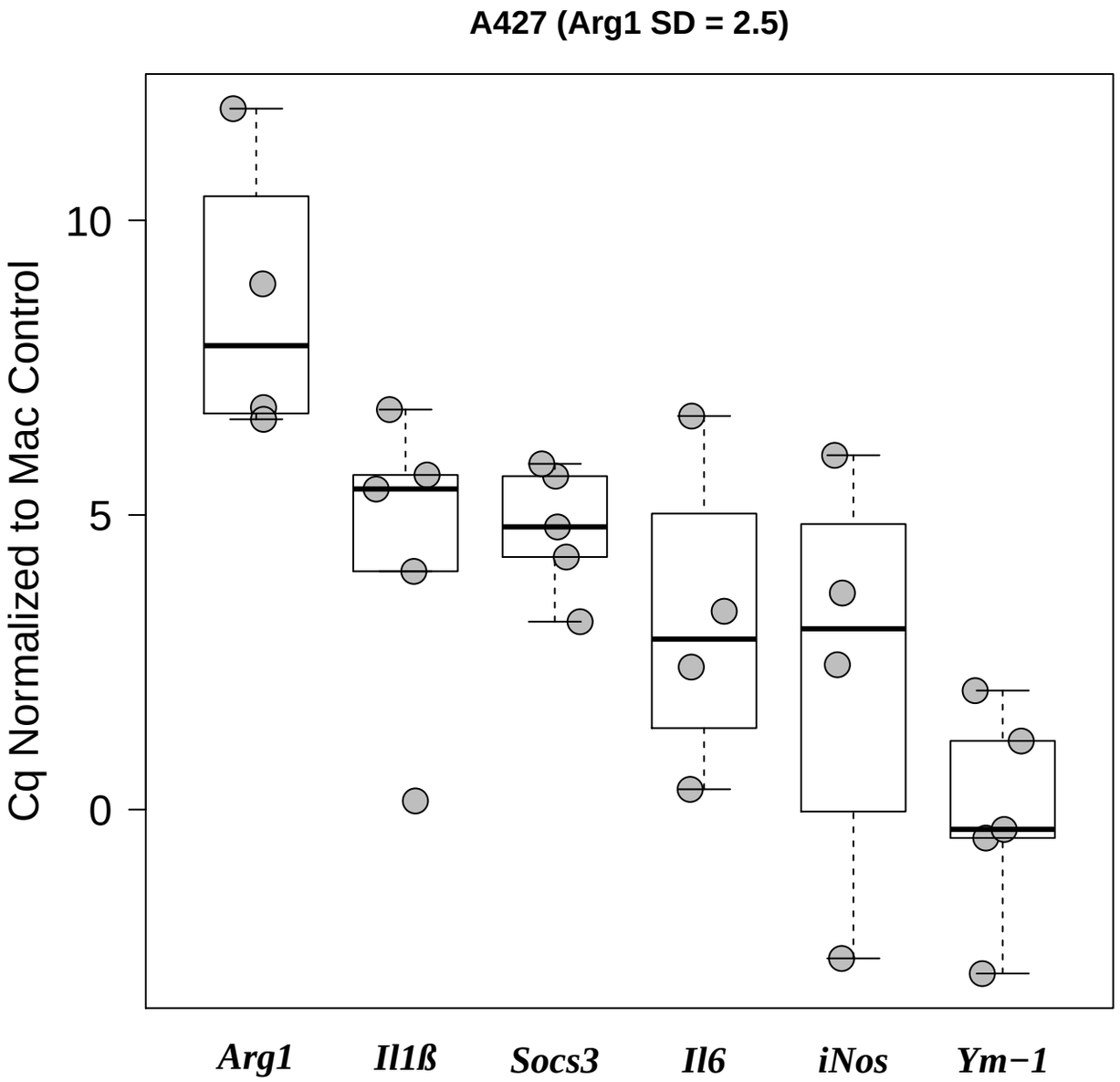
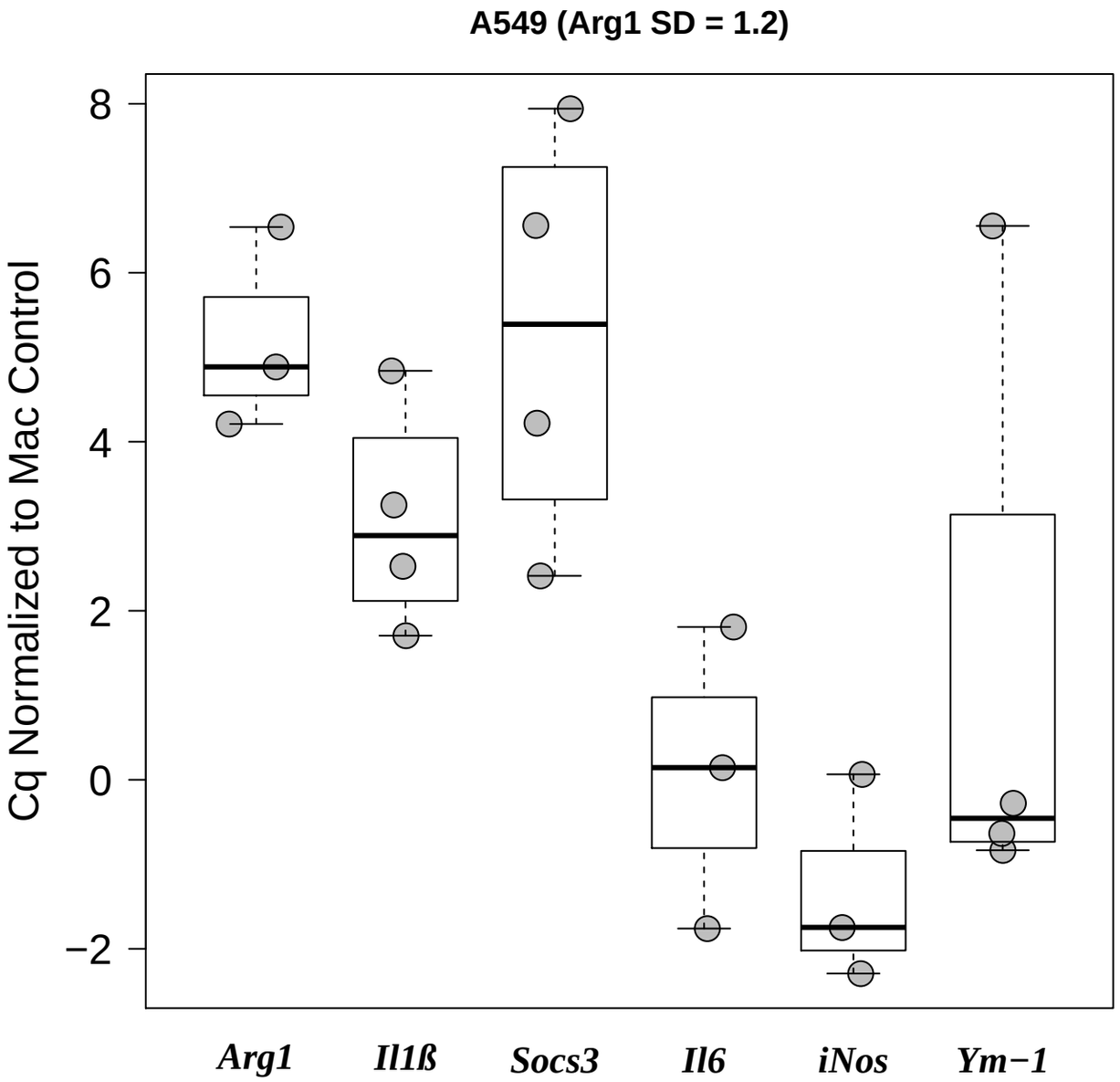
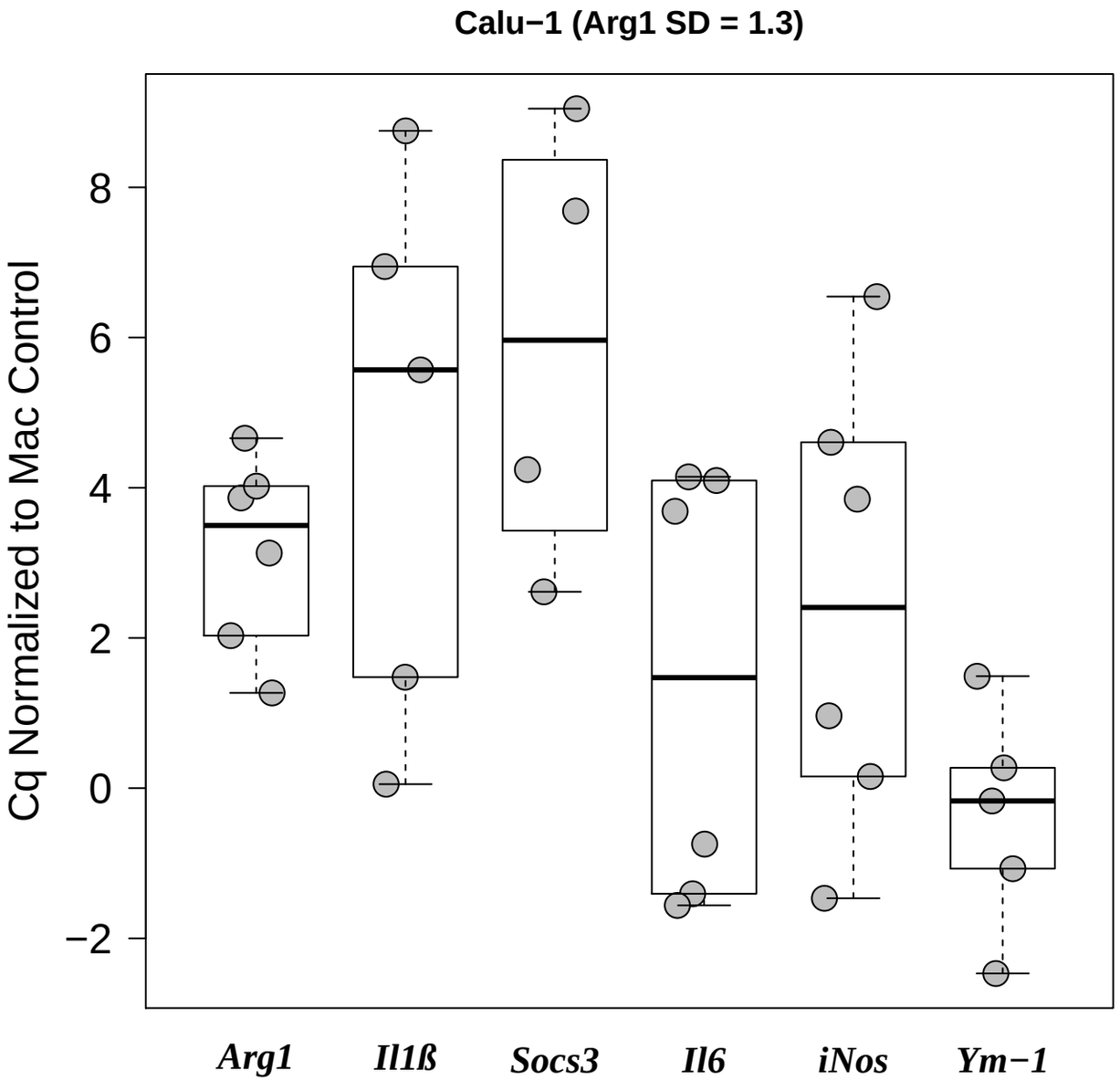
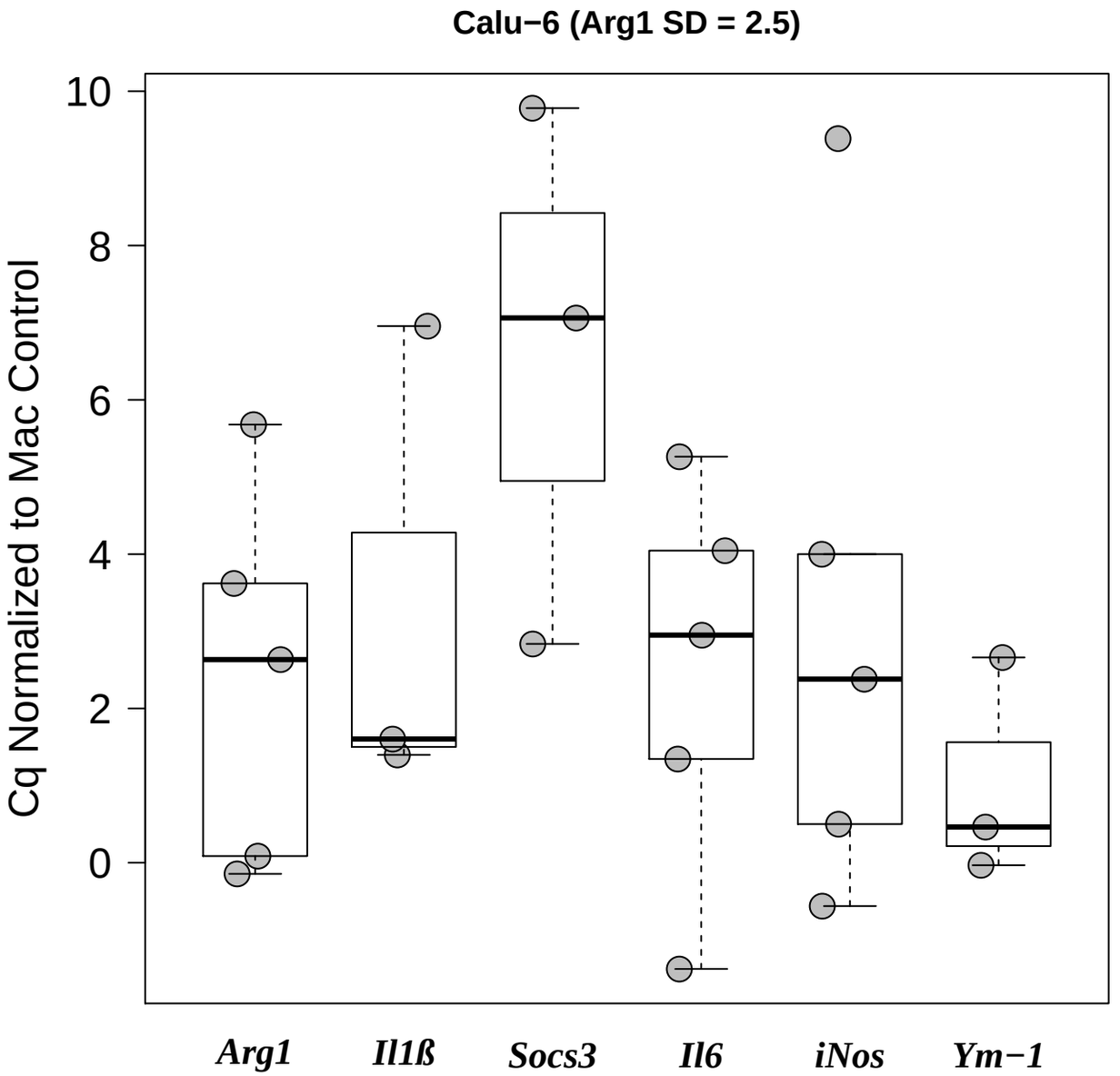
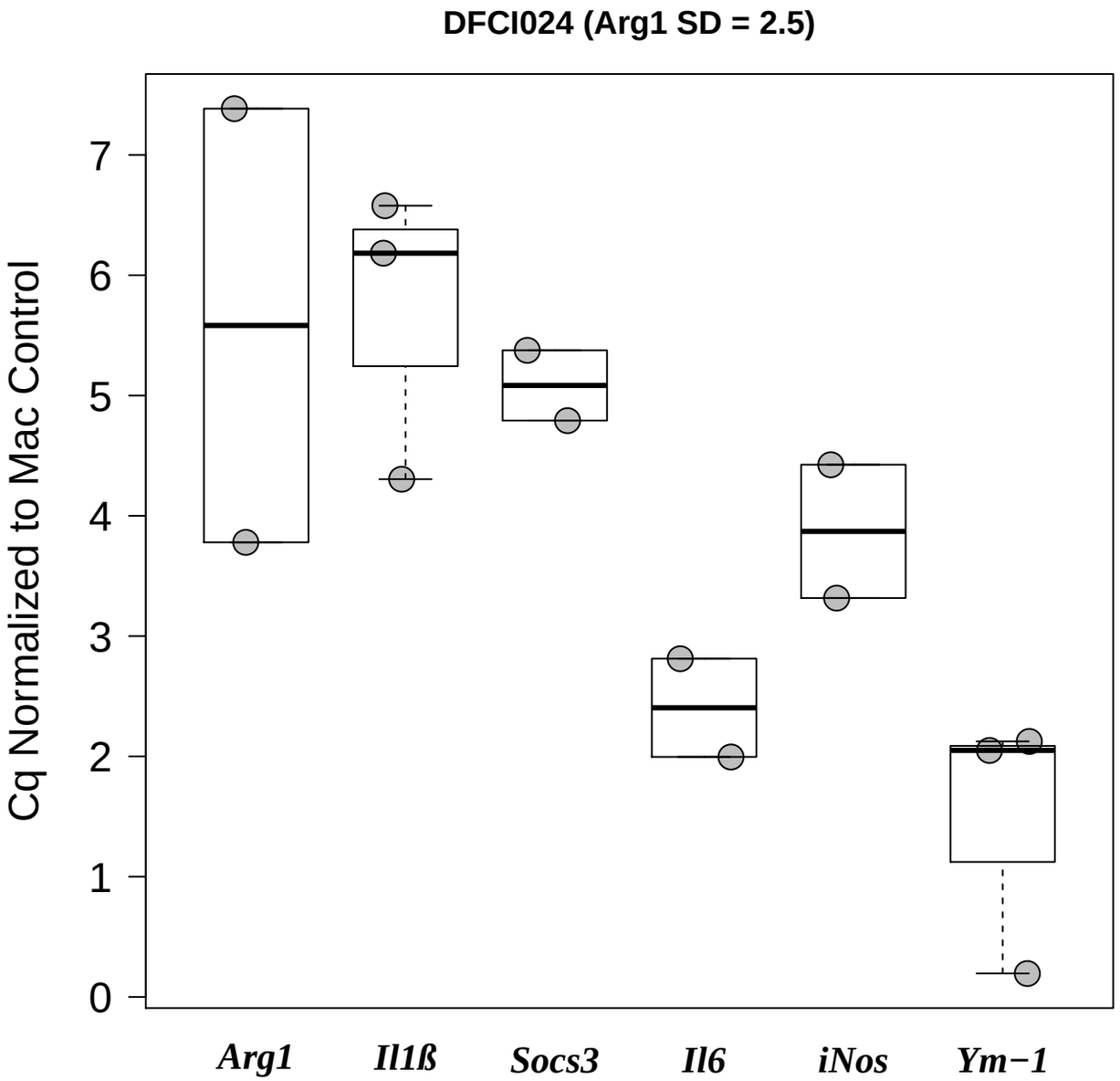
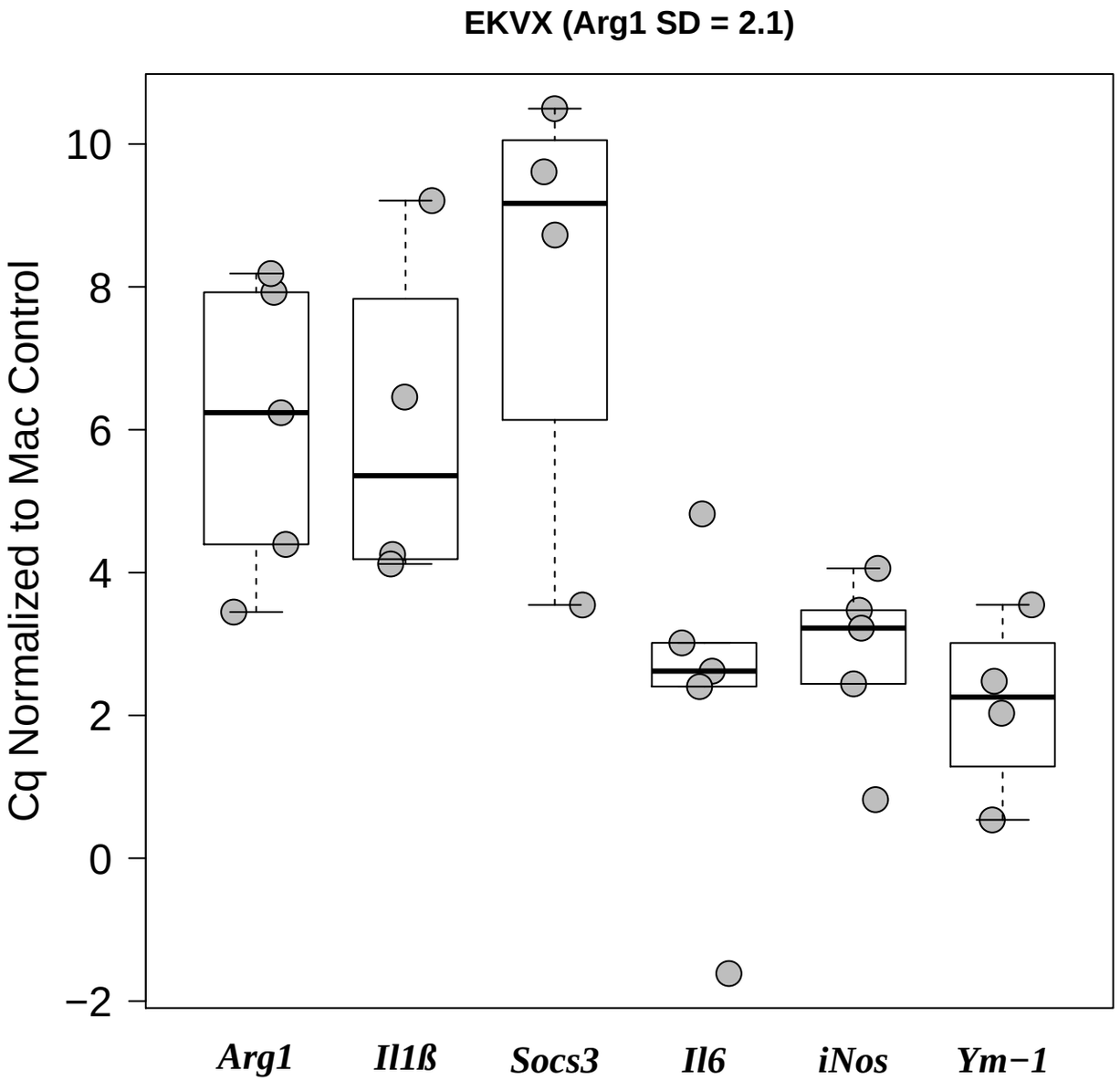

A427 (Arg1 SD = 2.5)
Cq Normalized to Mac Control
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

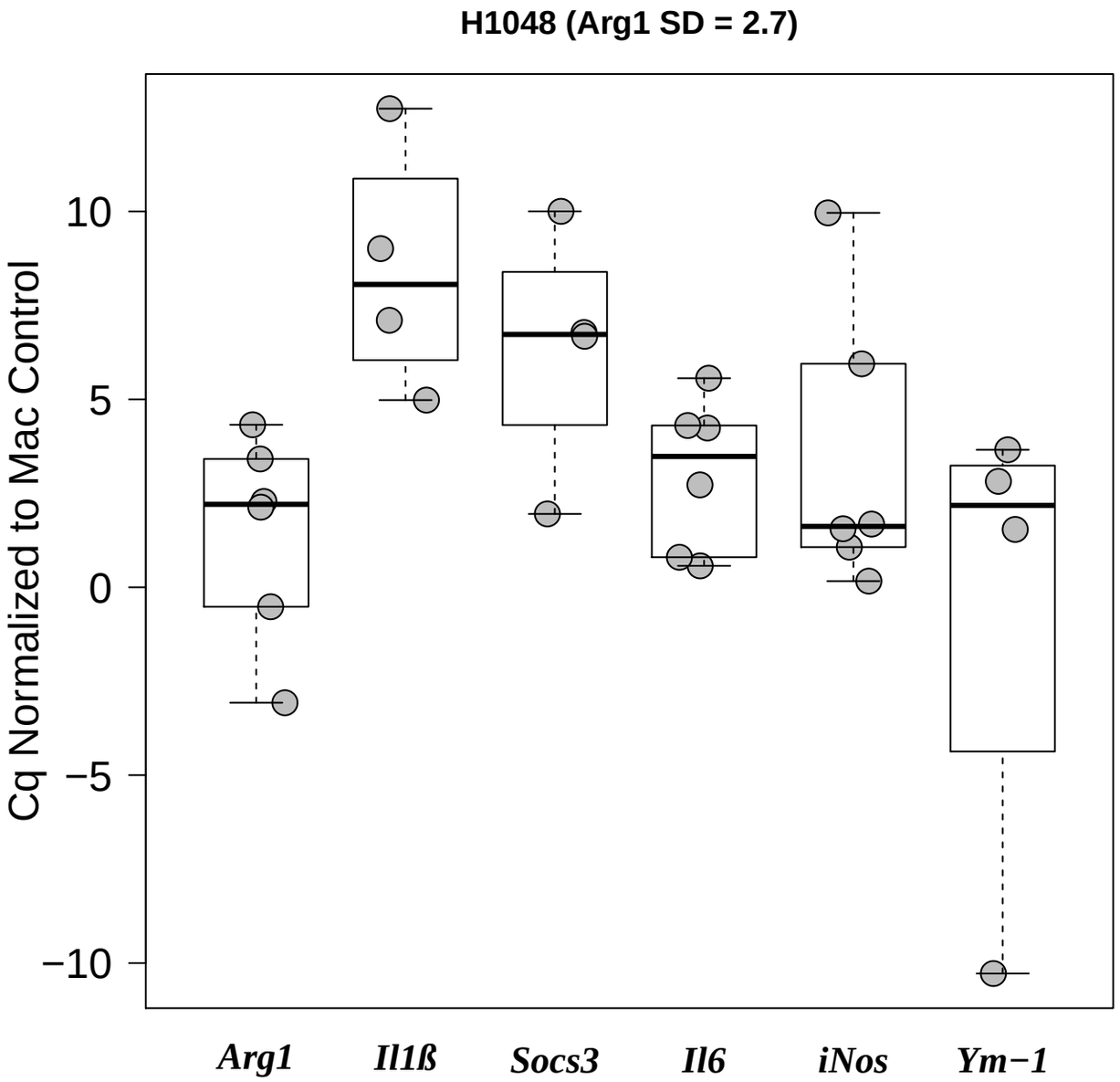

A549 (Arg1 SD = 1.2)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

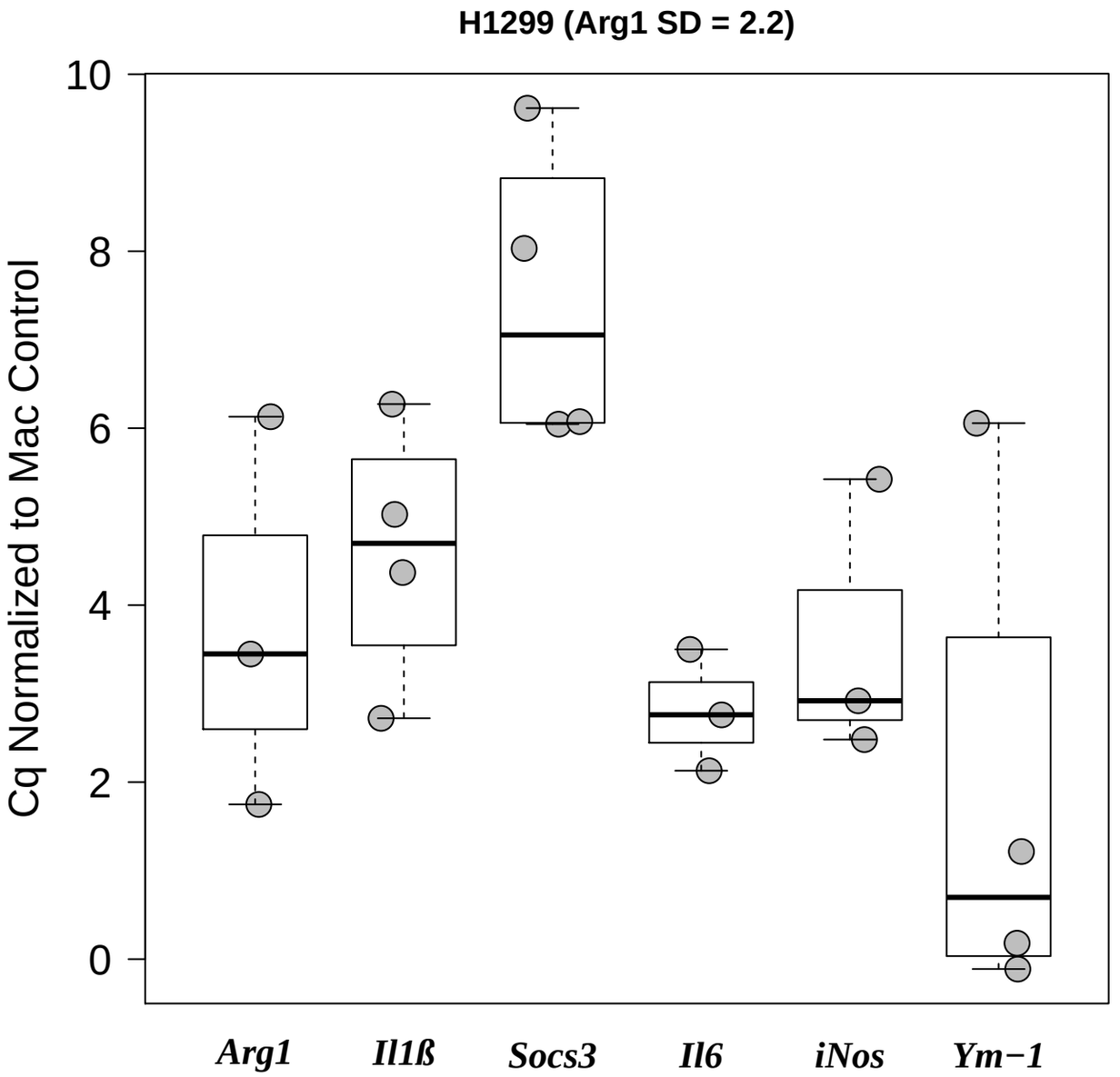

Calu−1 (Arg1 SD = 1.3)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

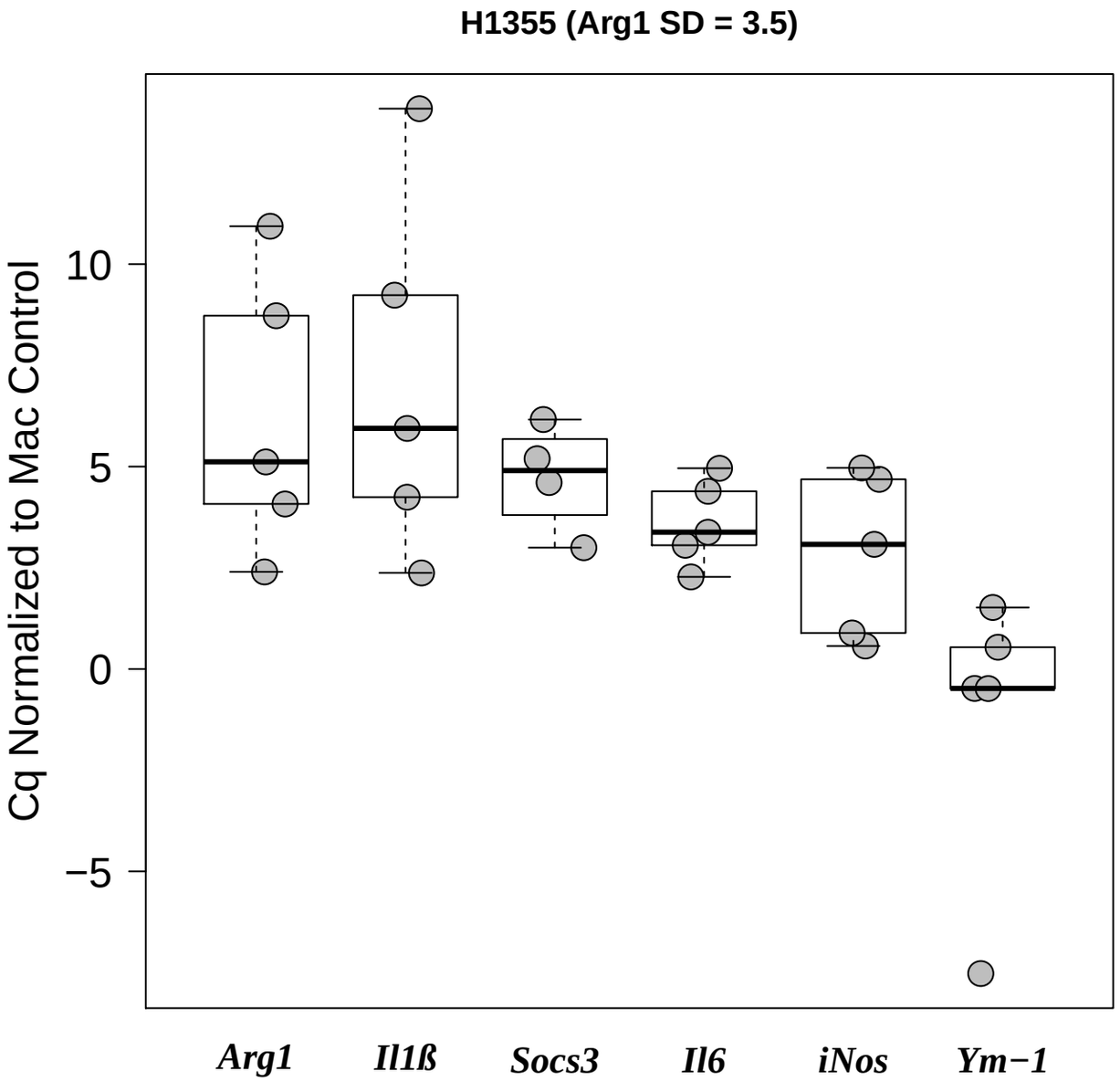

Calu−6 (Arg1 SD = 2.5)
Cq Normalized to Mac Control
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

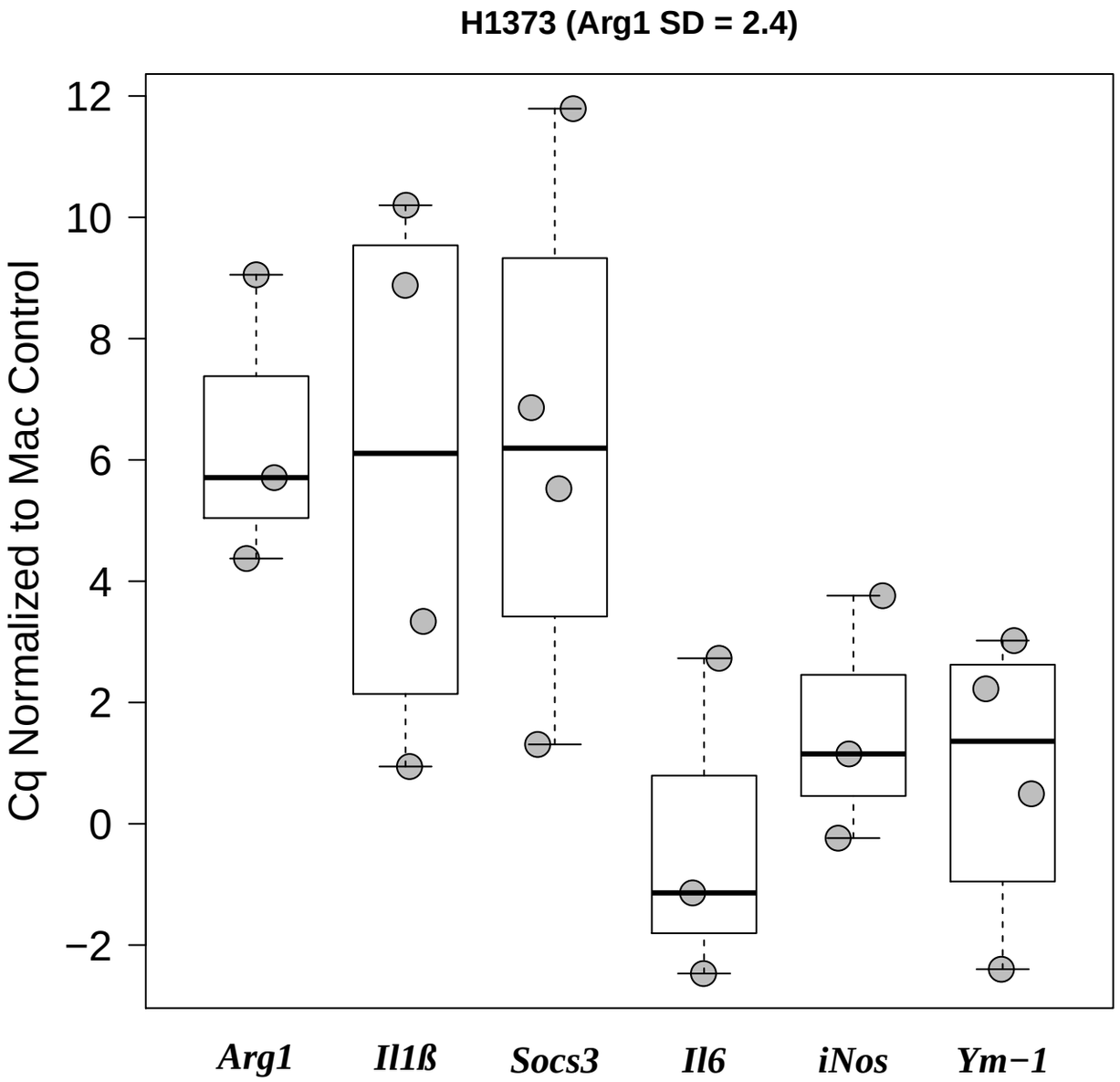

DFCI024 (Arg1 SD = 2.5)
Cq Normalized to Mac Control
0
1
2
3
4
5
6
7
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

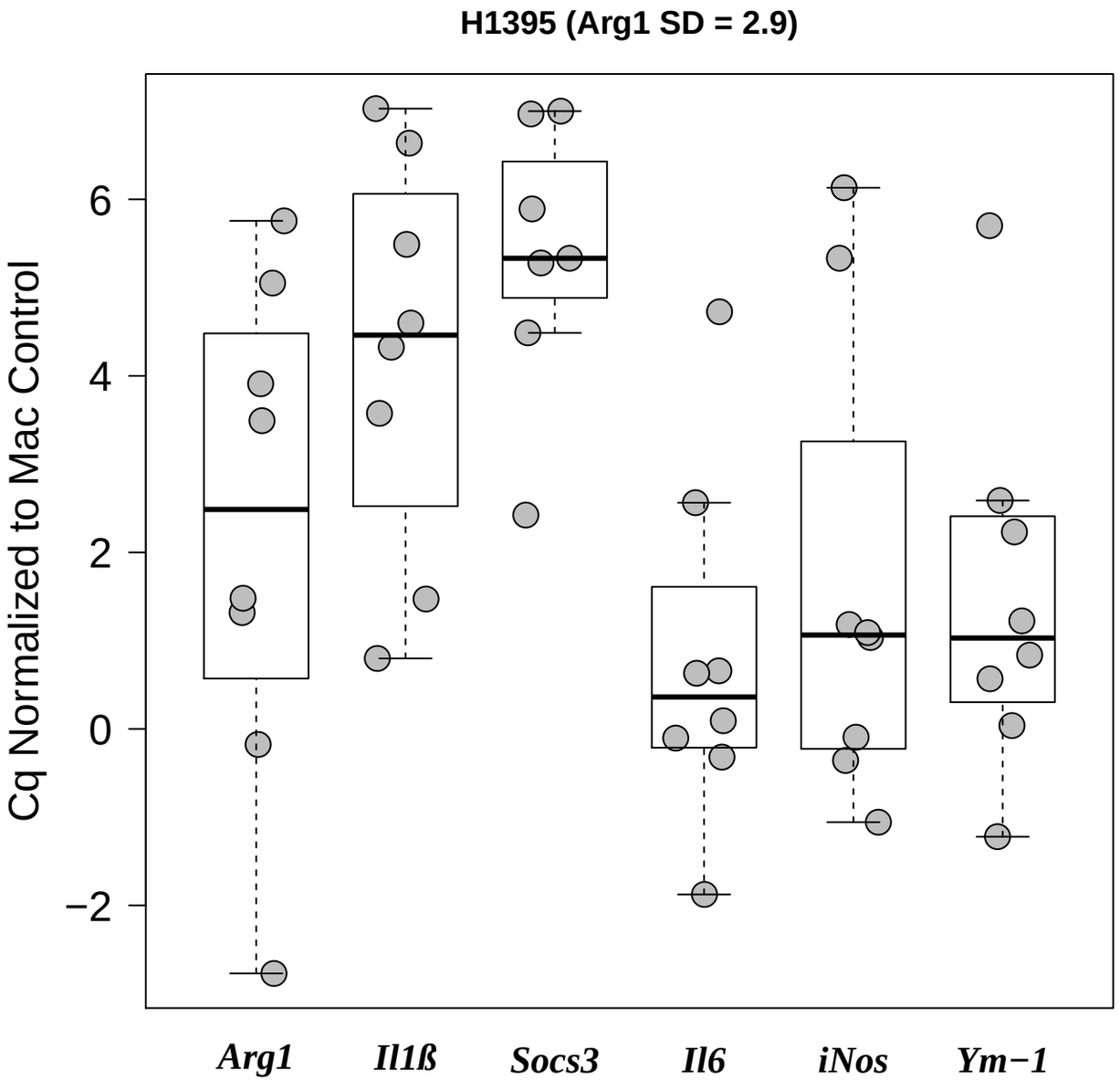

EKVX (Arg1 SD = 2.1)
Cq Normalized to Mac Control
−2
0
2
4
6
8
10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

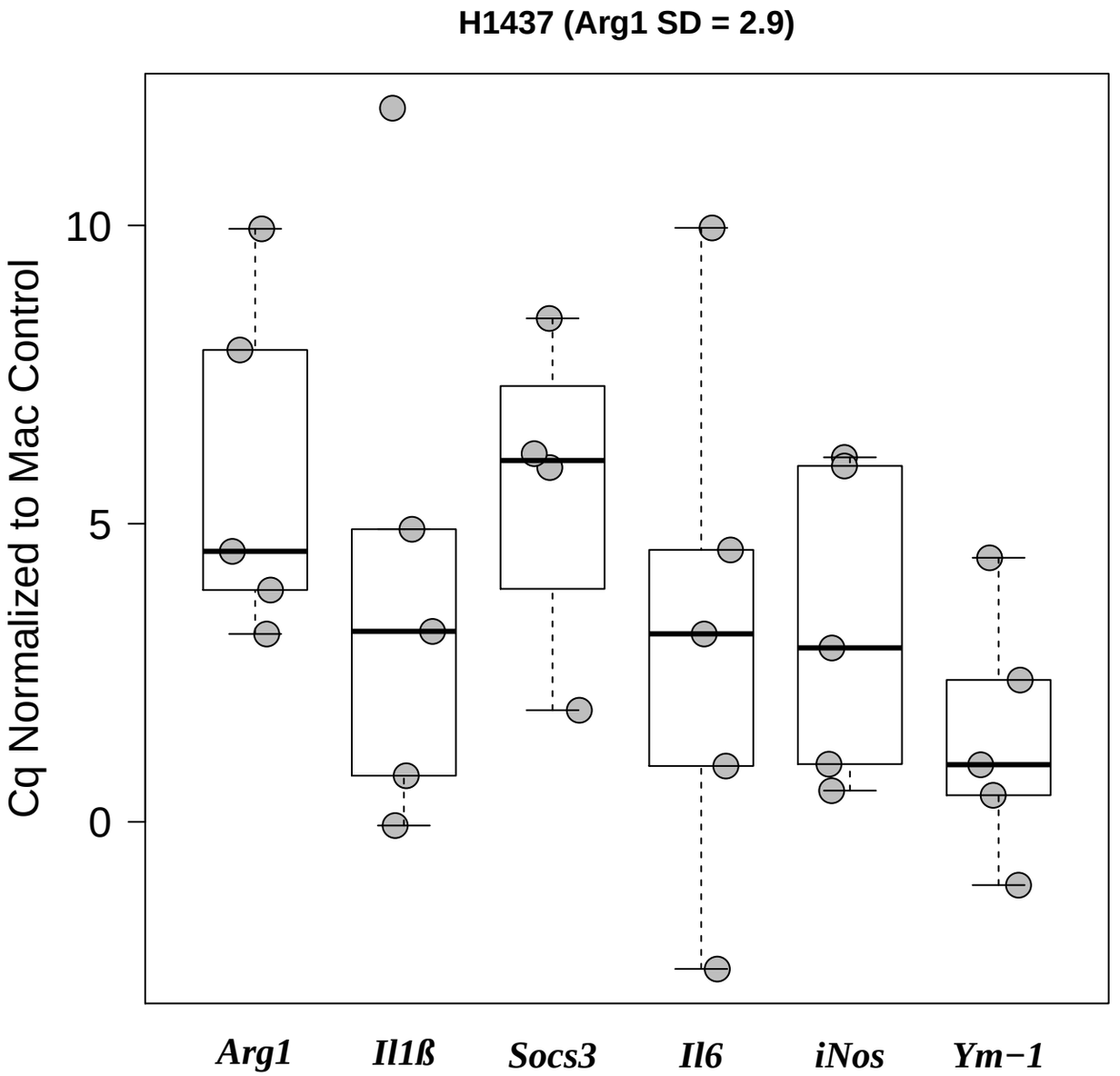

H1048 (Arg1 SD = 2.7)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

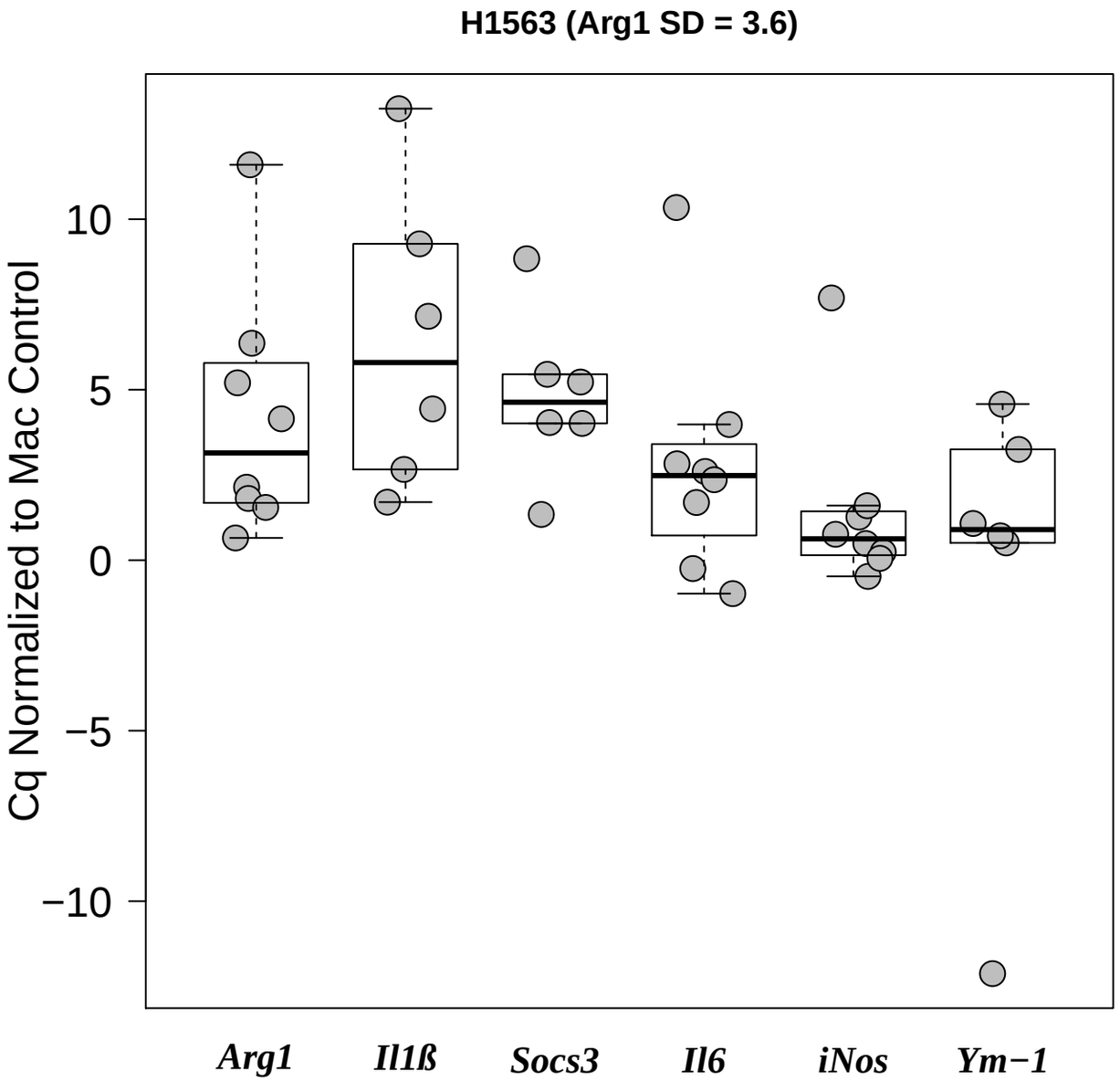

H1299 (Arg1 SD = 2.2)
Cq Normalized to Mac Control
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

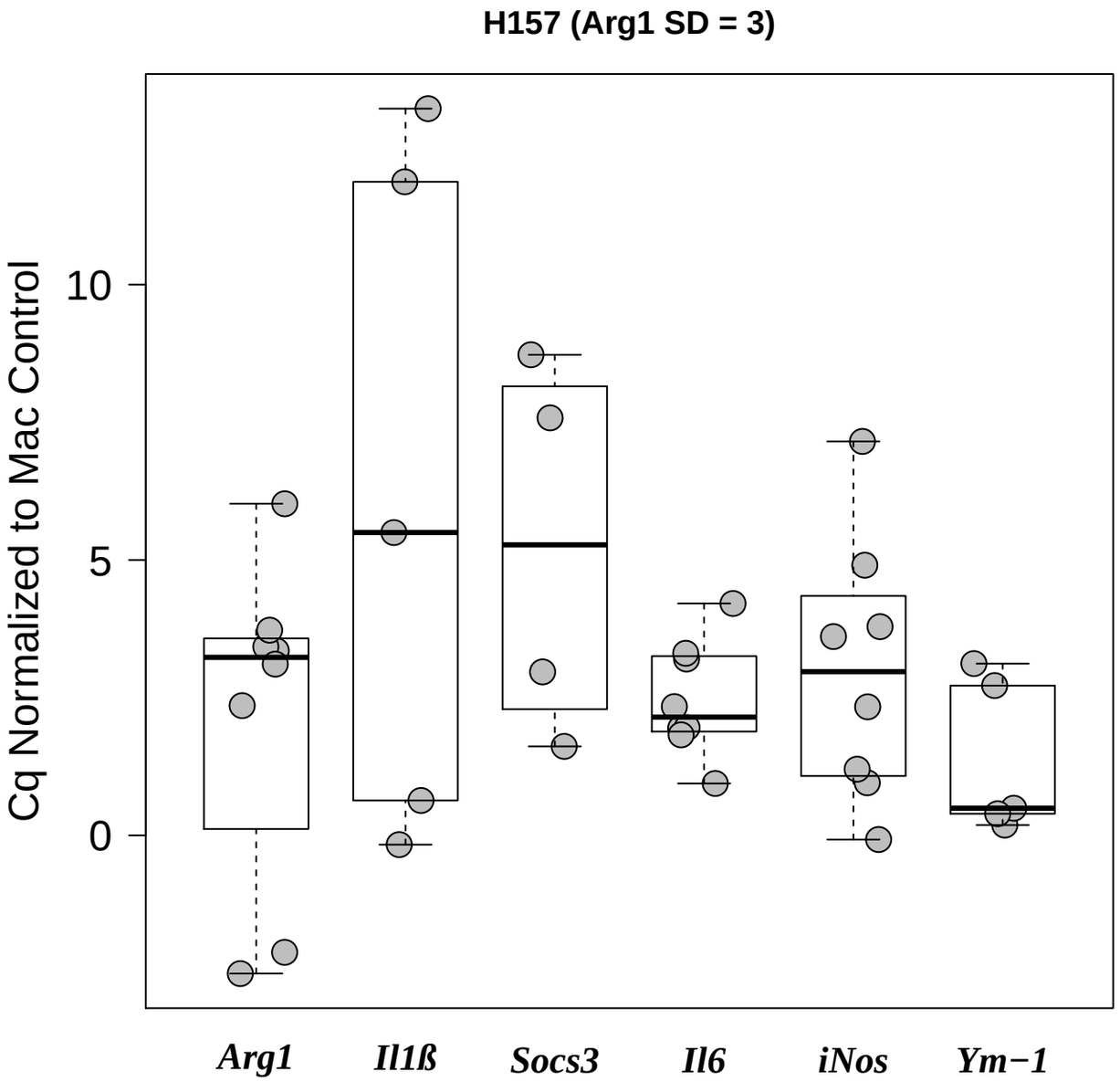

H1355 (Arg1 SD = 3.5)
Cq Normalized to Mac Control
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

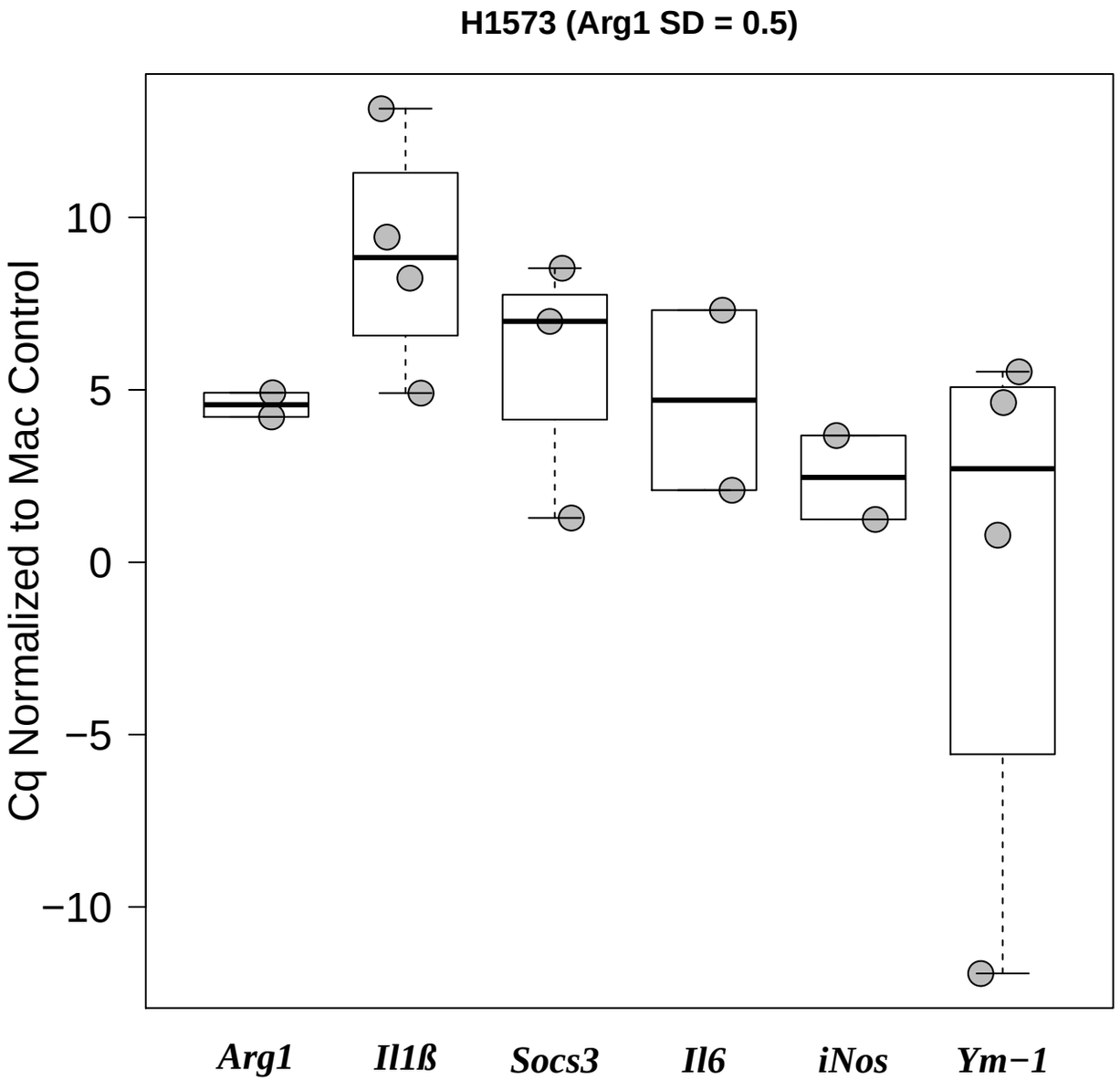

H1373 (Arg1 SD = 2.4)
Cq Normalized to Mac Control
12
10
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

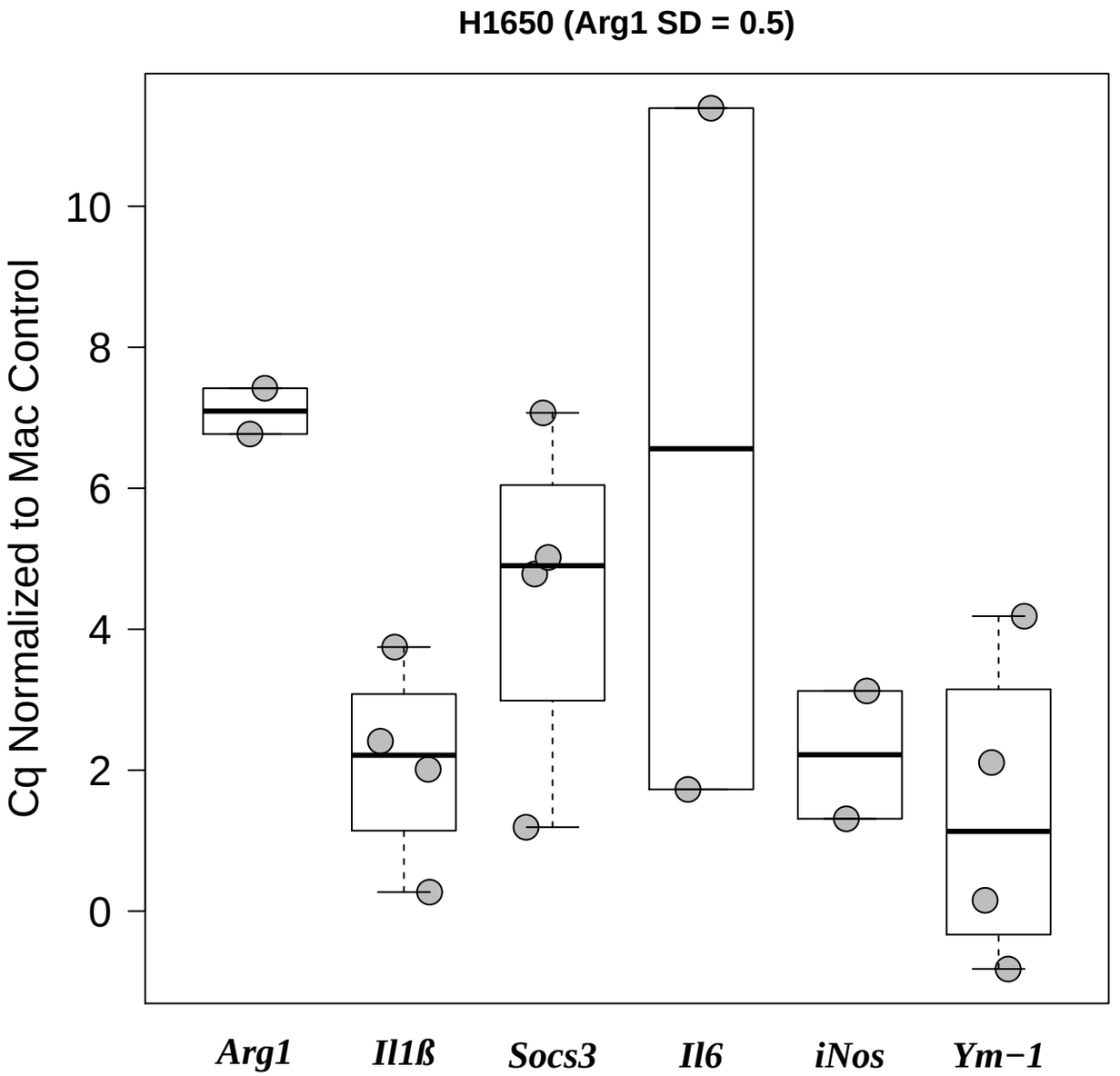

H1395 (Arg1 SD = 2.9)
Cq Normalized to Mac Control
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

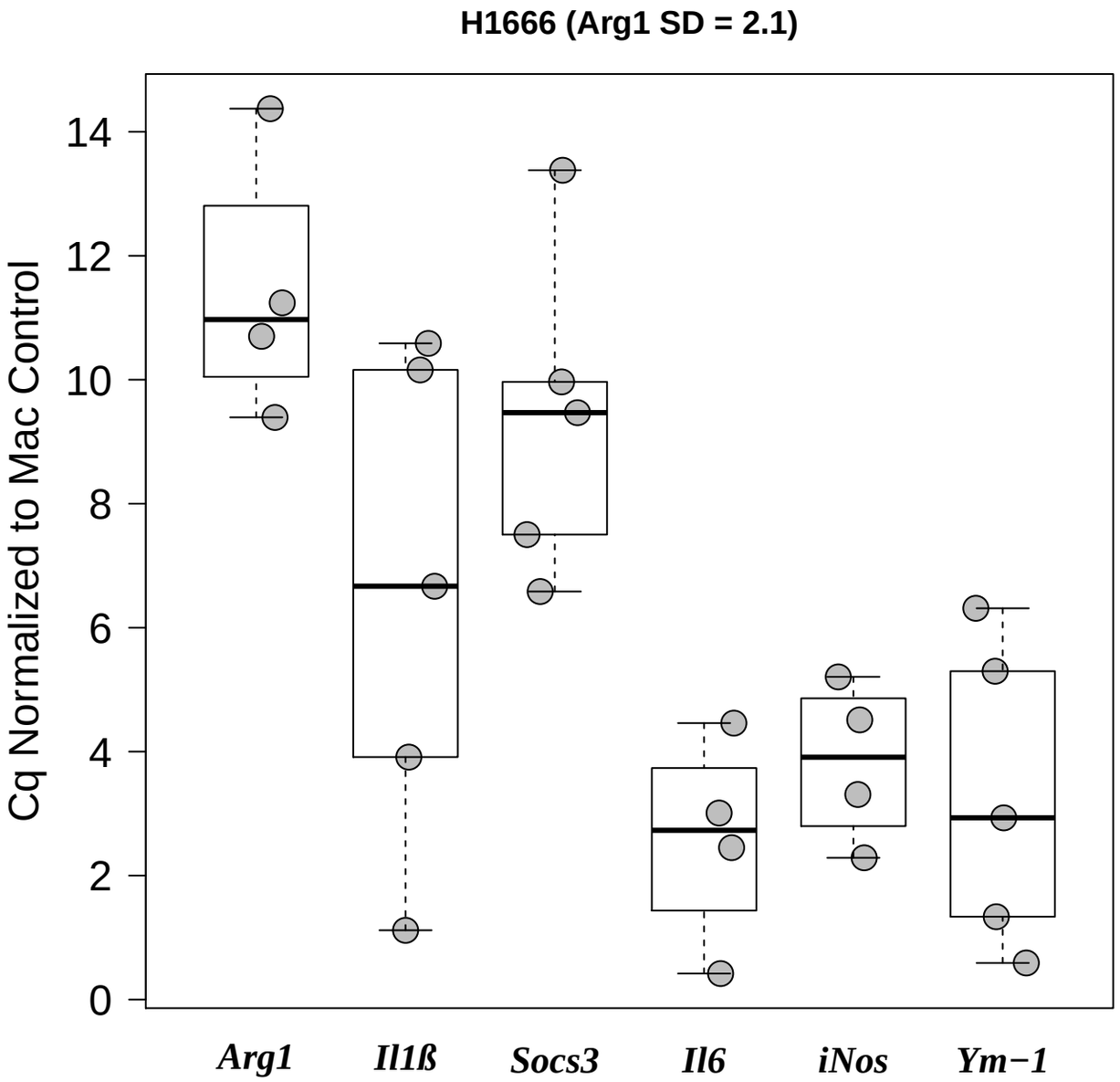

H1437 (Arg1 SD = 2.9)
Cq Normalized to Mac Control
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

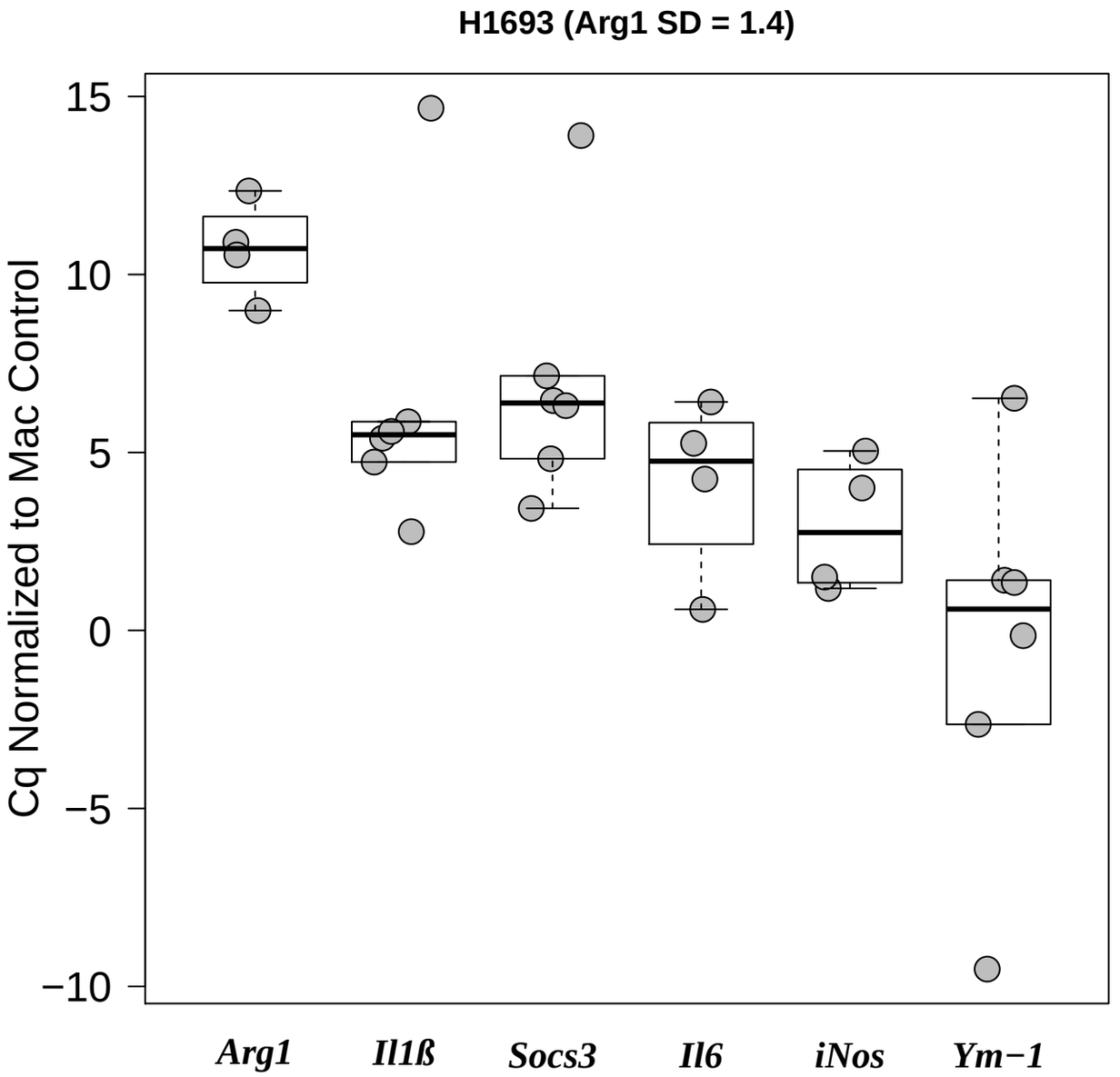

H1563 (Arg1 SD = 3.6)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

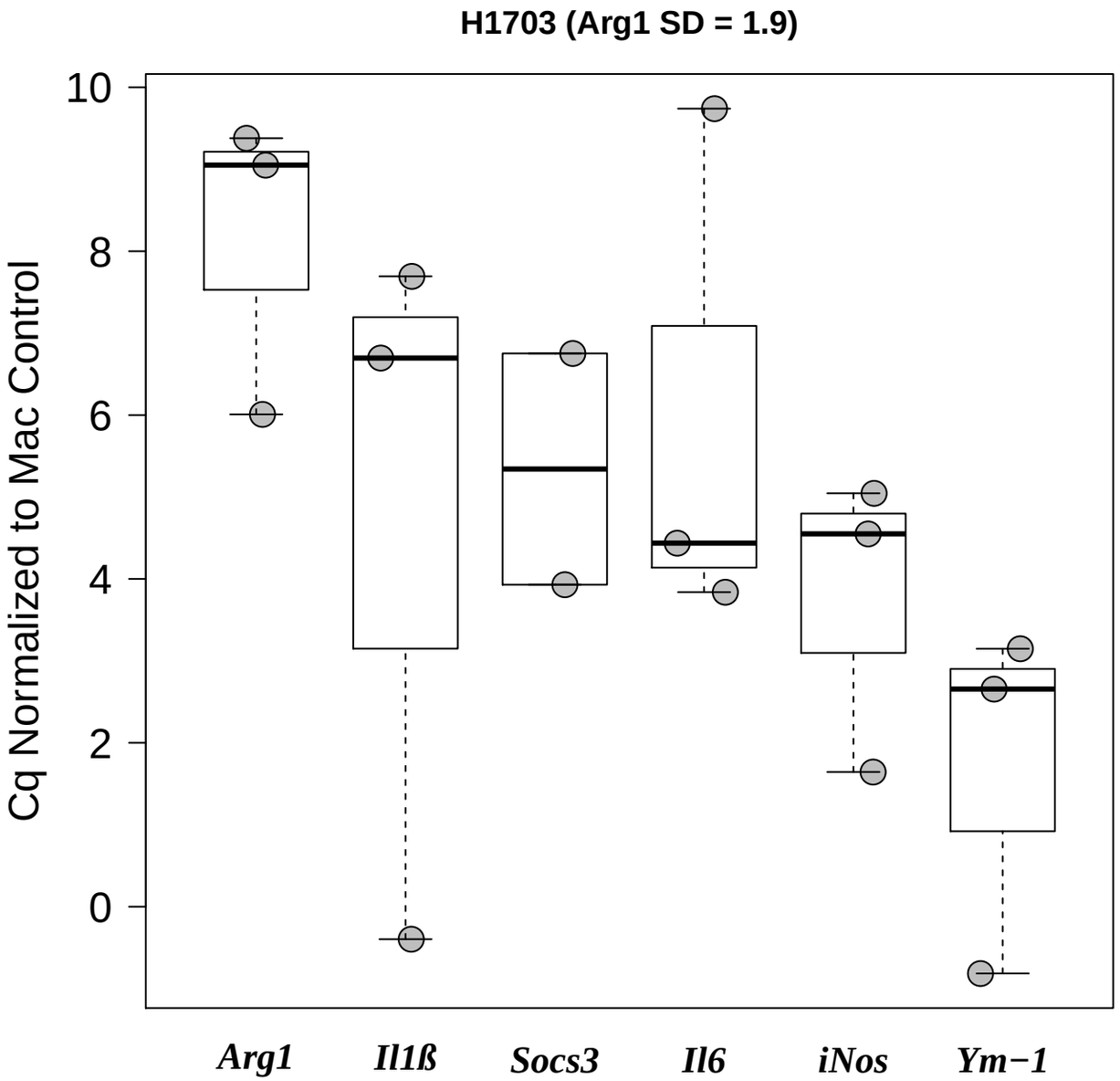

H157 (Arg1 SD = 3)
Cq Normalized to Mac Control
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

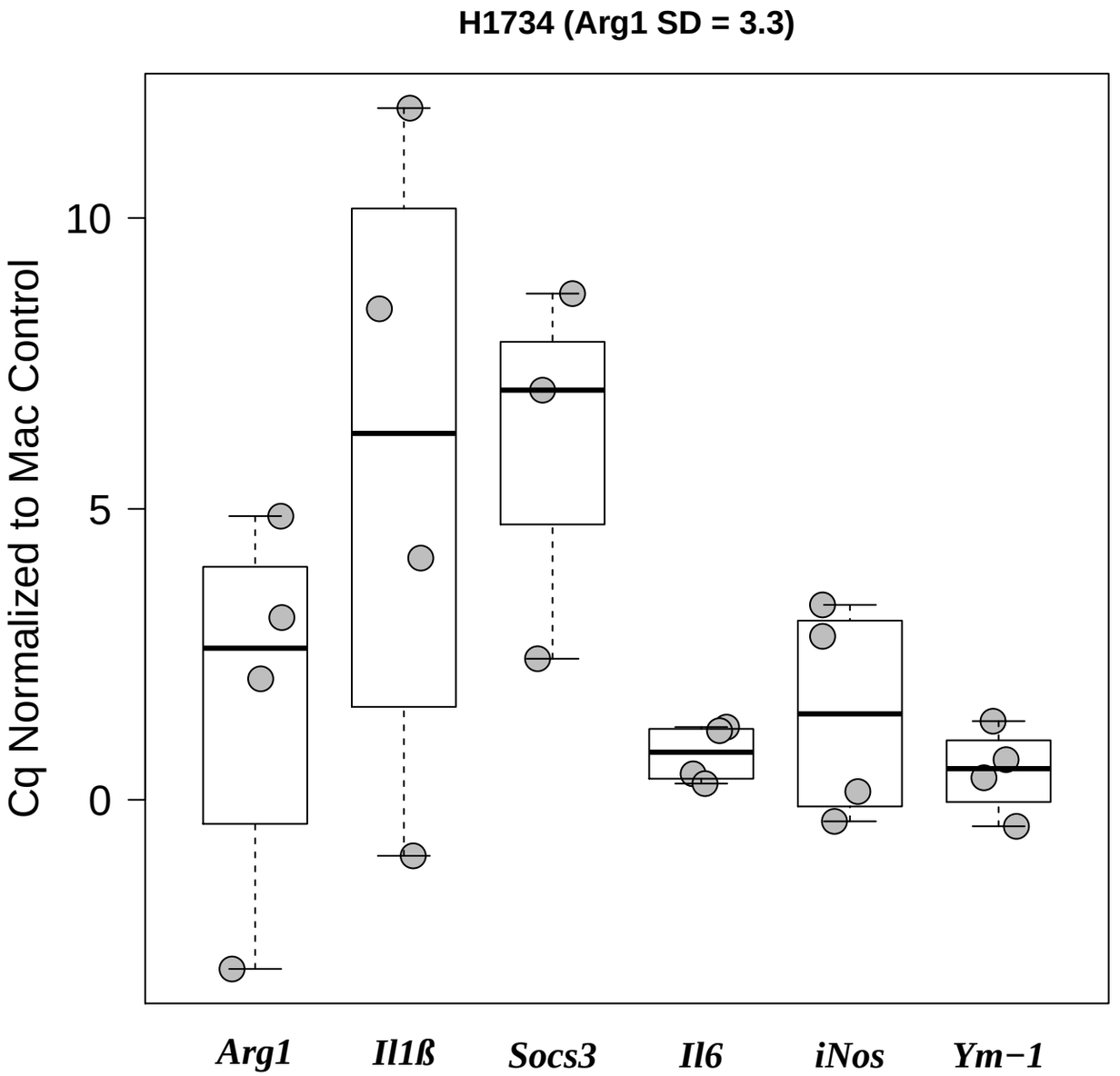

H1573 (Arg1 SD = 0.5)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

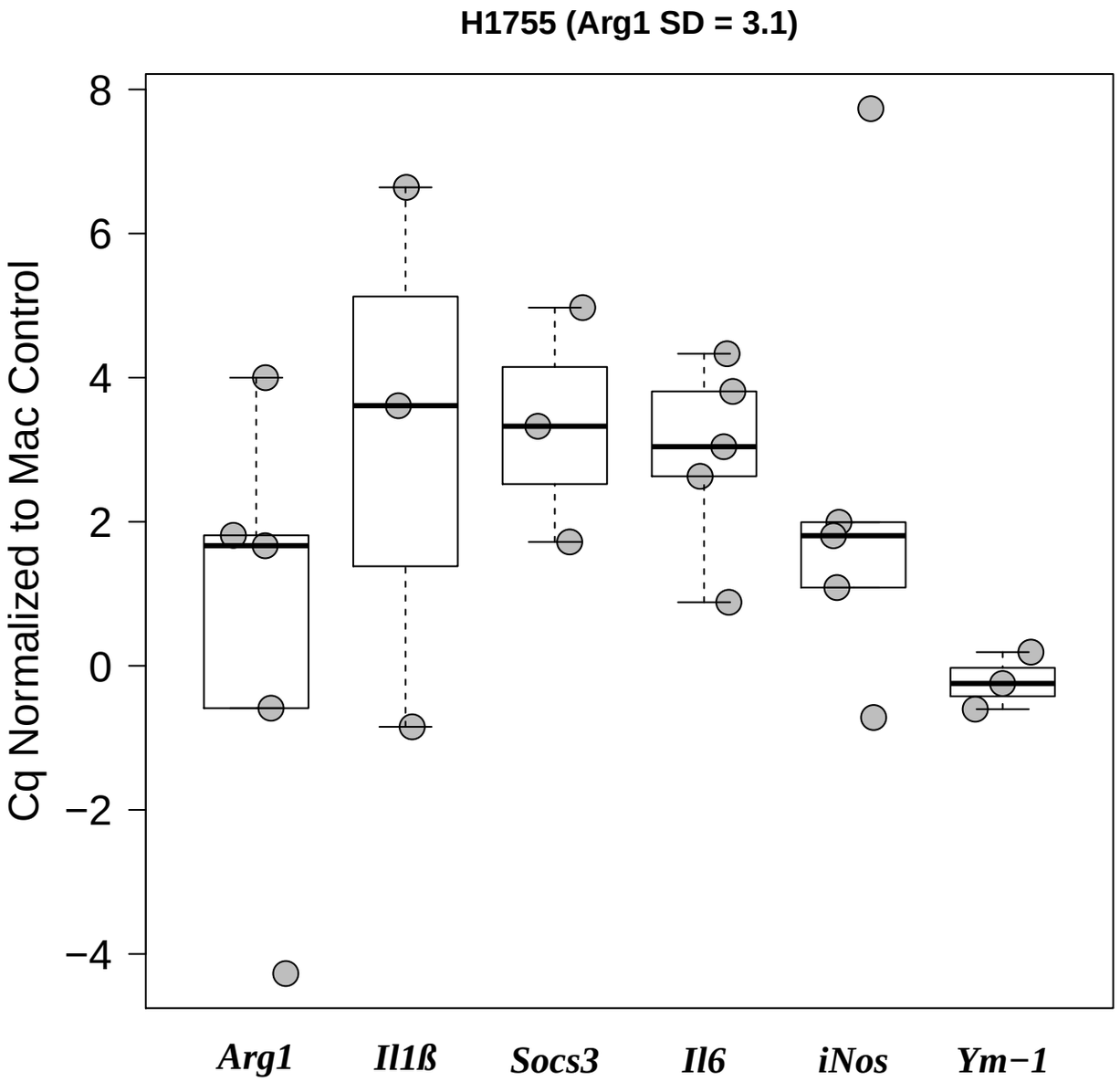

H1650 (Arg1 SD = 0.5)
Cq Normalized to Mac Control
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

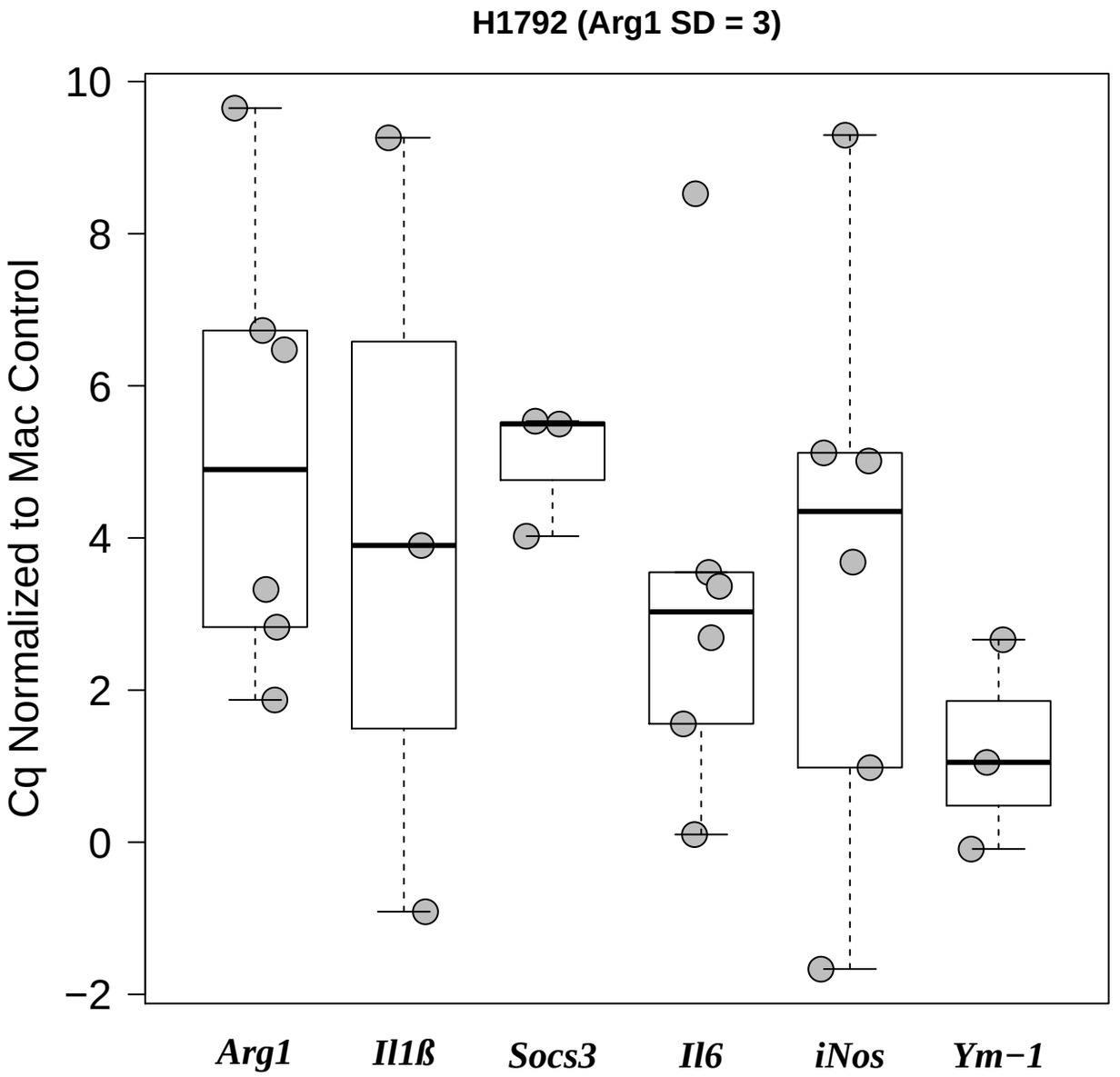

H1666 (Arg1 SD = 2.1)
Cq Normalized to Mac Control
0
2
4
6
8
10
12
14
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

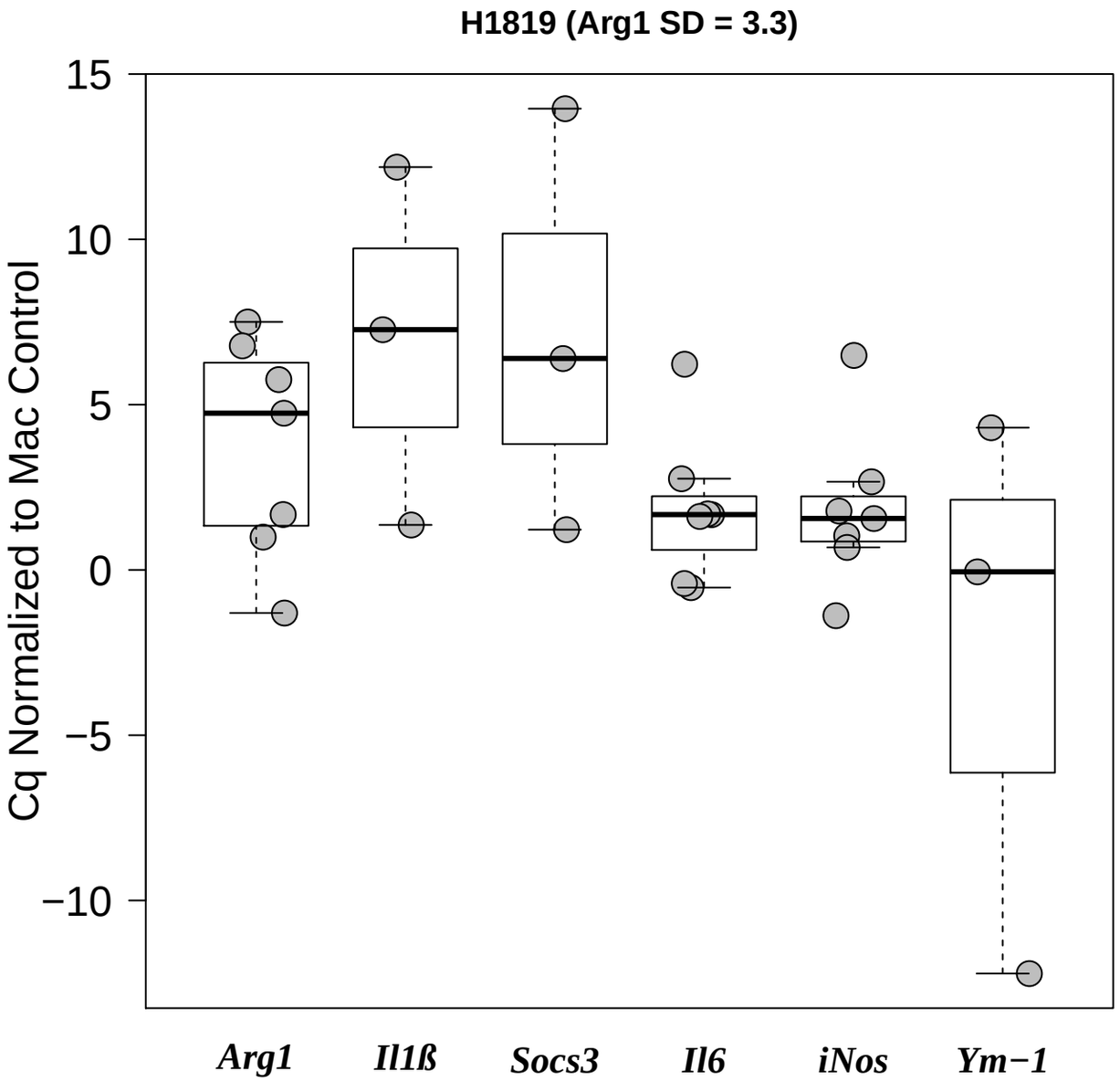

H1693 (Arg1 SD = 1.4)
Cq Normalized to Mac Control
−10
−5
0
5
10
15
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

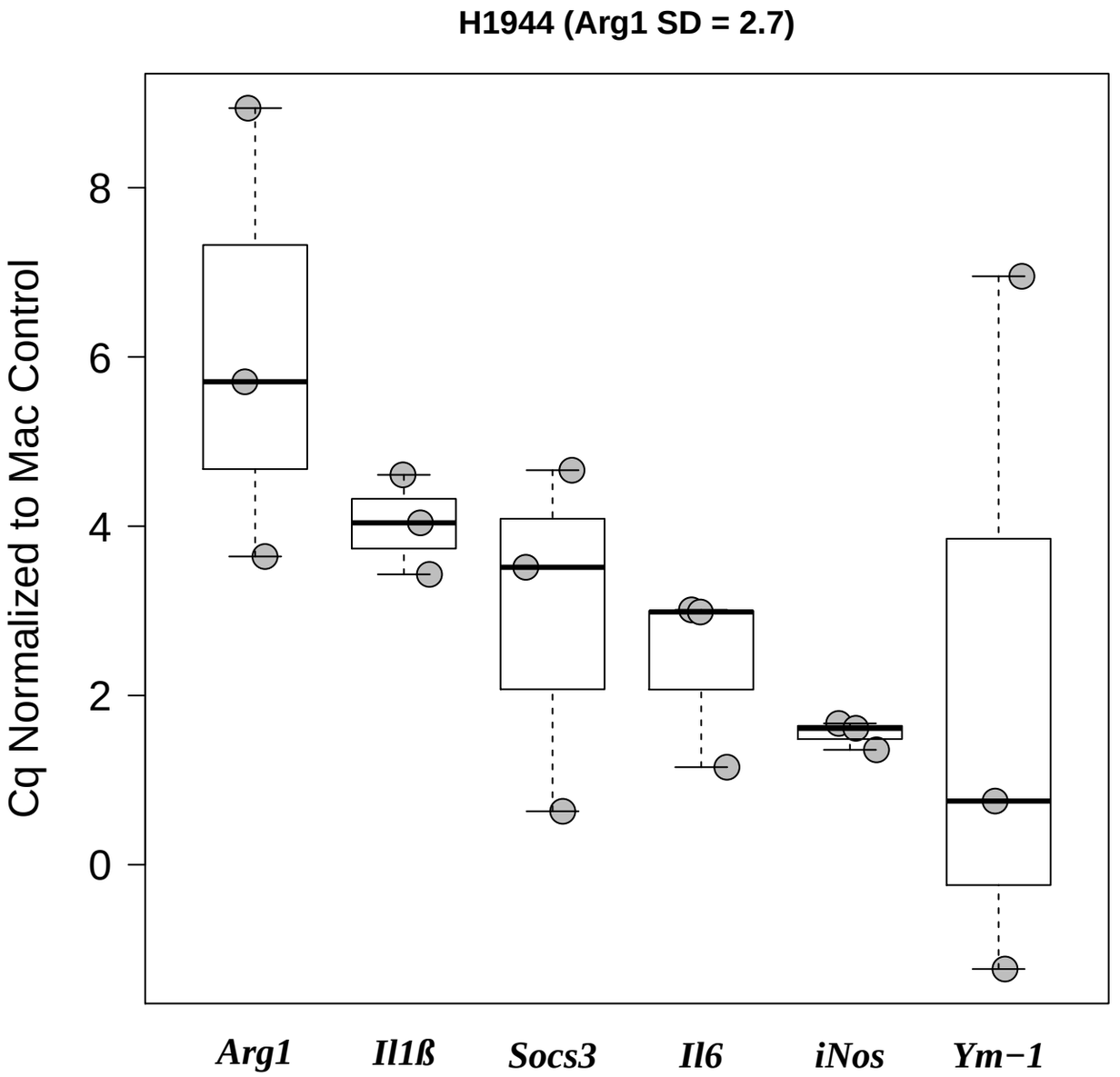

H1703 (Arg1 SD = 1.9)
Cq Normalized to Mac Control
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

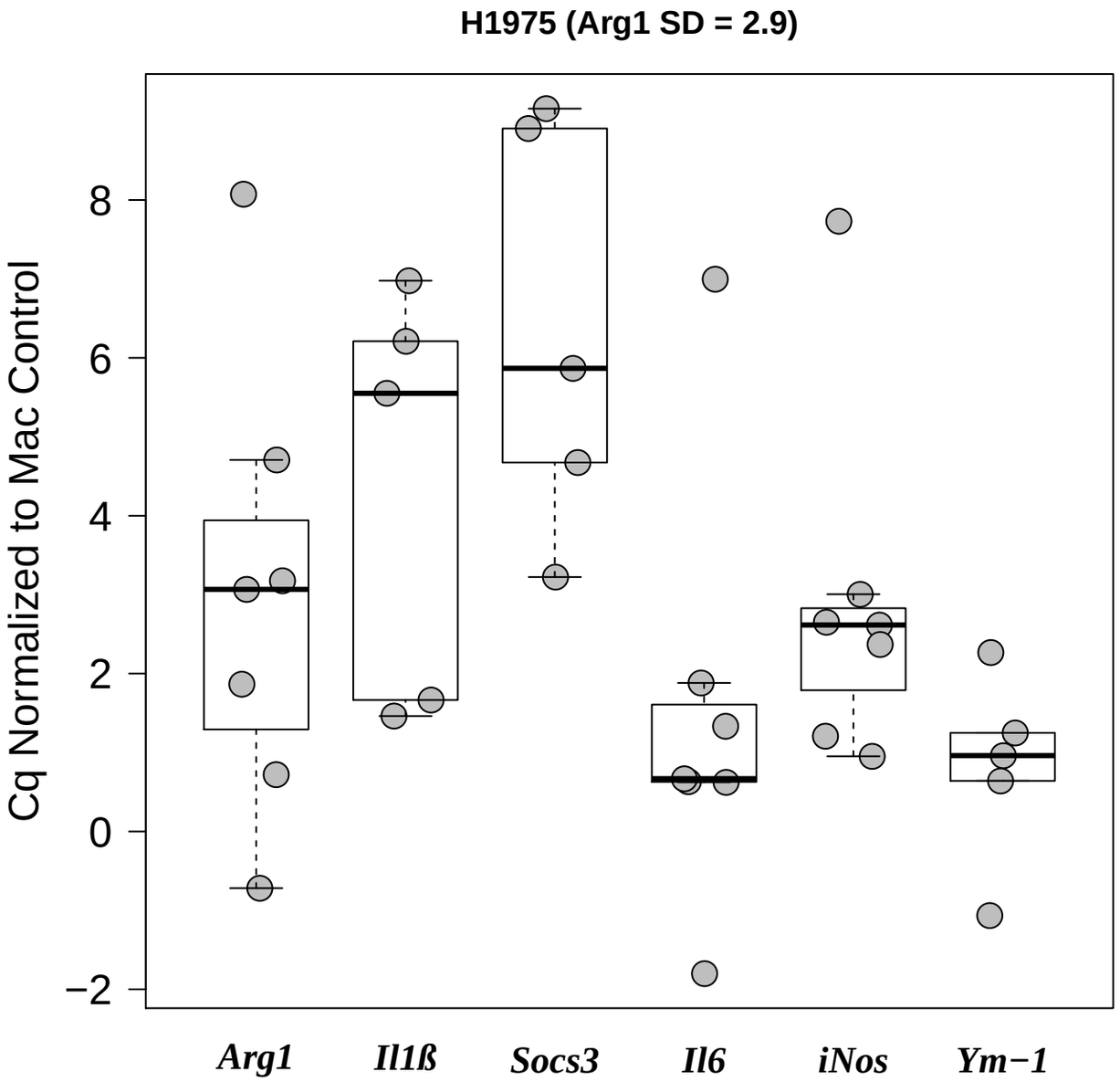

H1734 (Arg1 SD = 3.3)
Cq Normalized to Mac Control
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

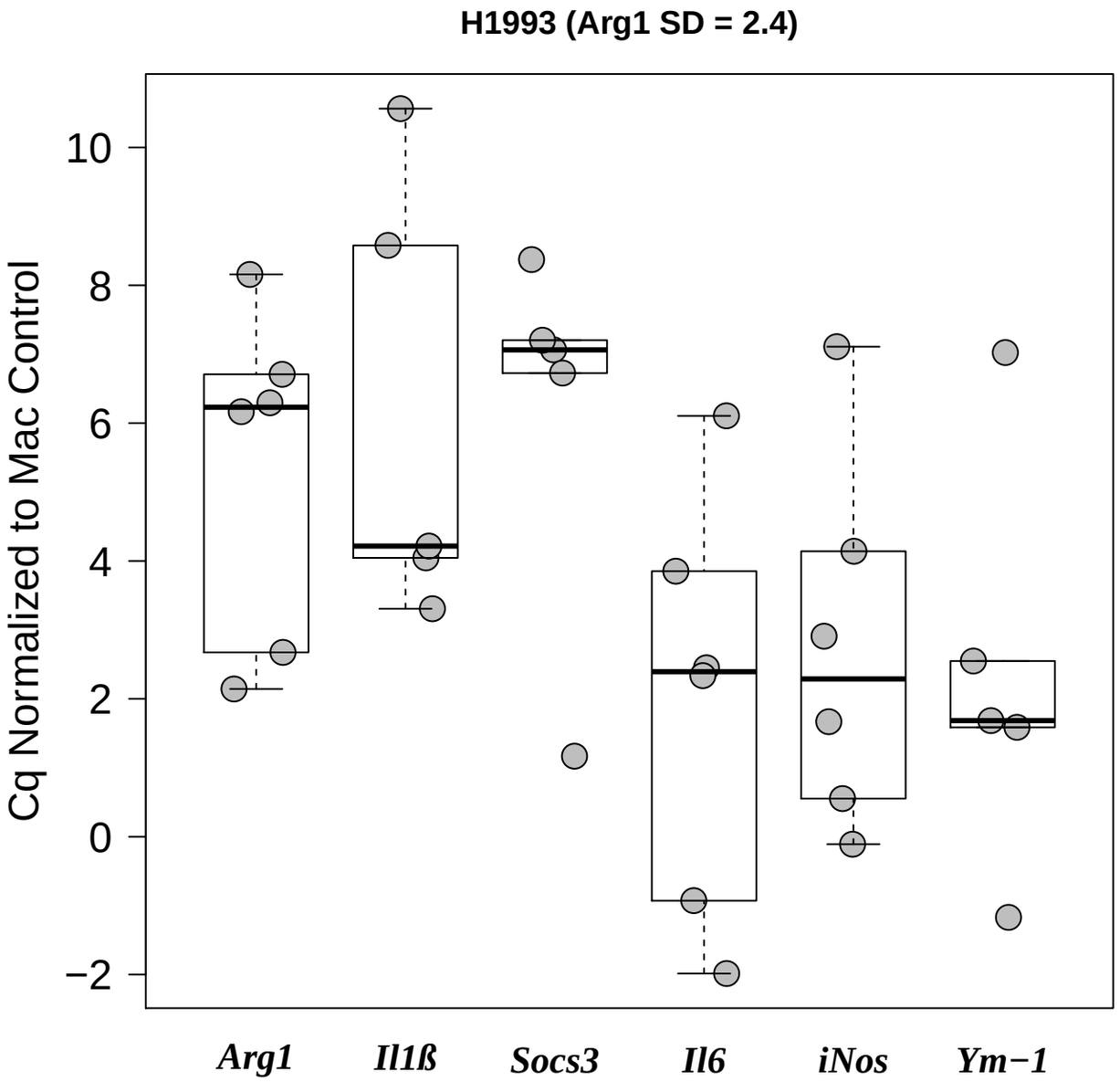

H1755 (Arg1 SD = 3.1)
Cq Normalized to Mac Control
8
6
4
2
0
−2
−4
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

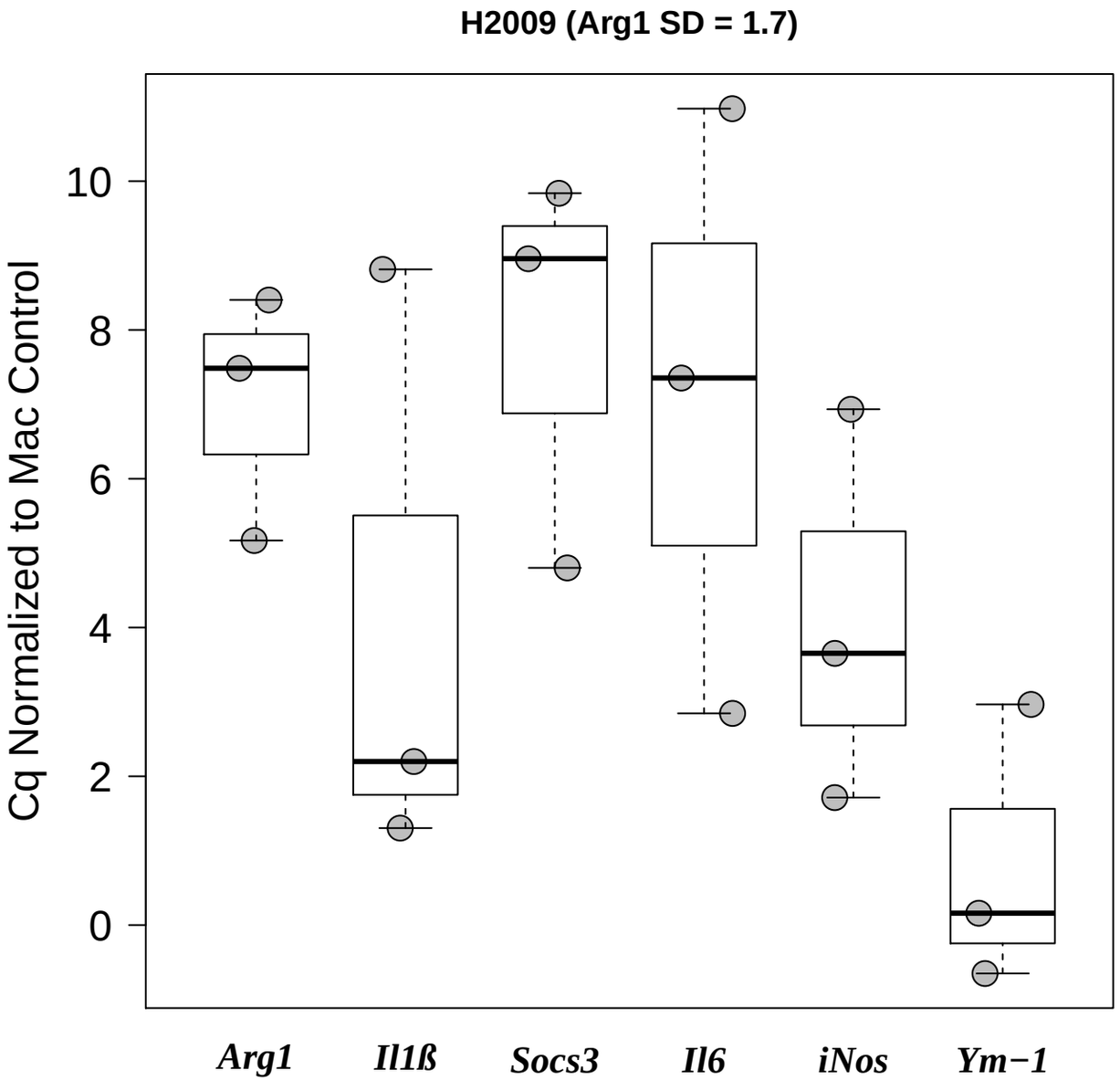

H1792 (Arg1 SD = 3)
Cq Normalized to Mac Control
10
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

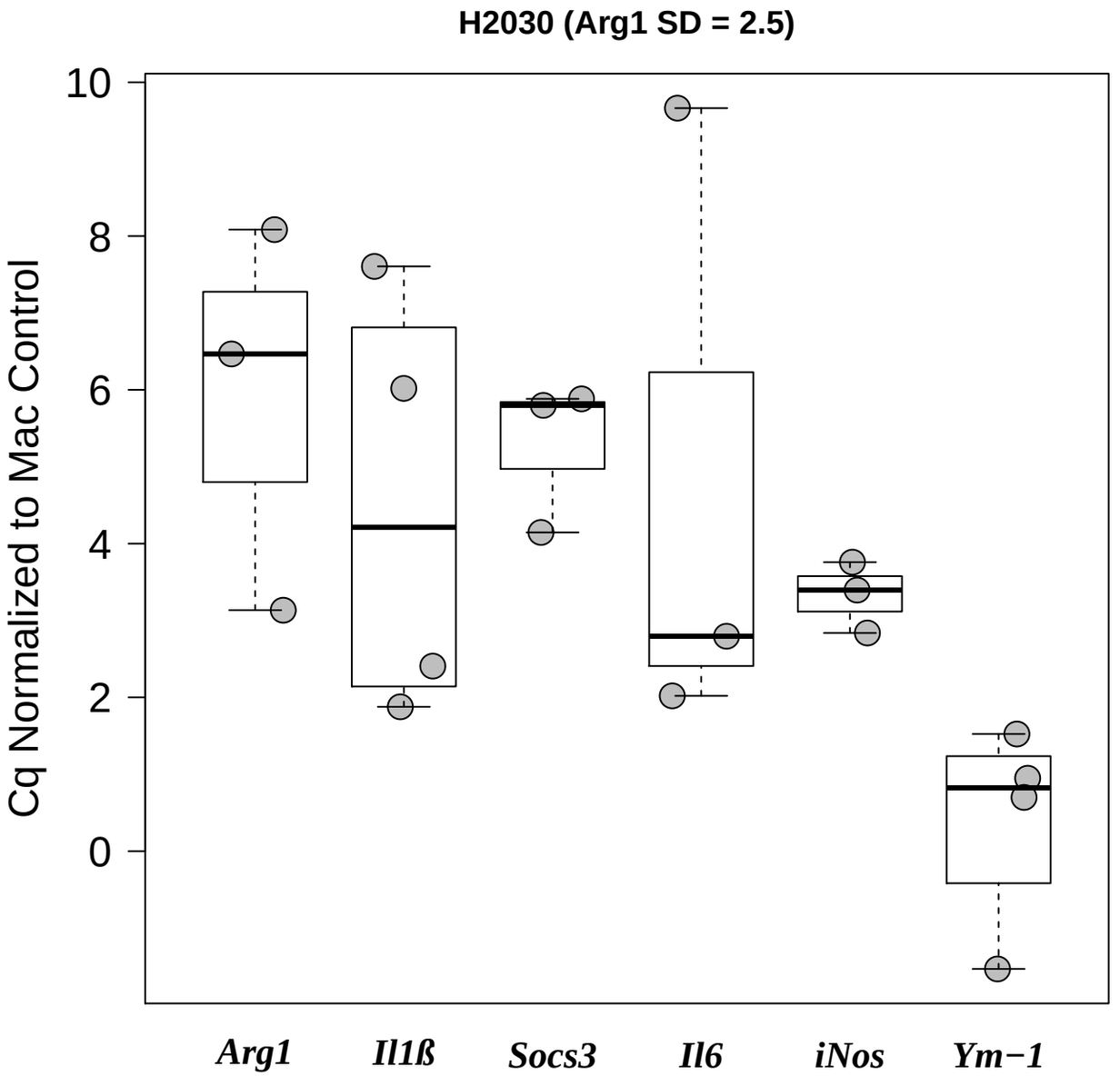

H1819 (Arg1 SD = 3.3)
Cq Normalized to Mac Control
15
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

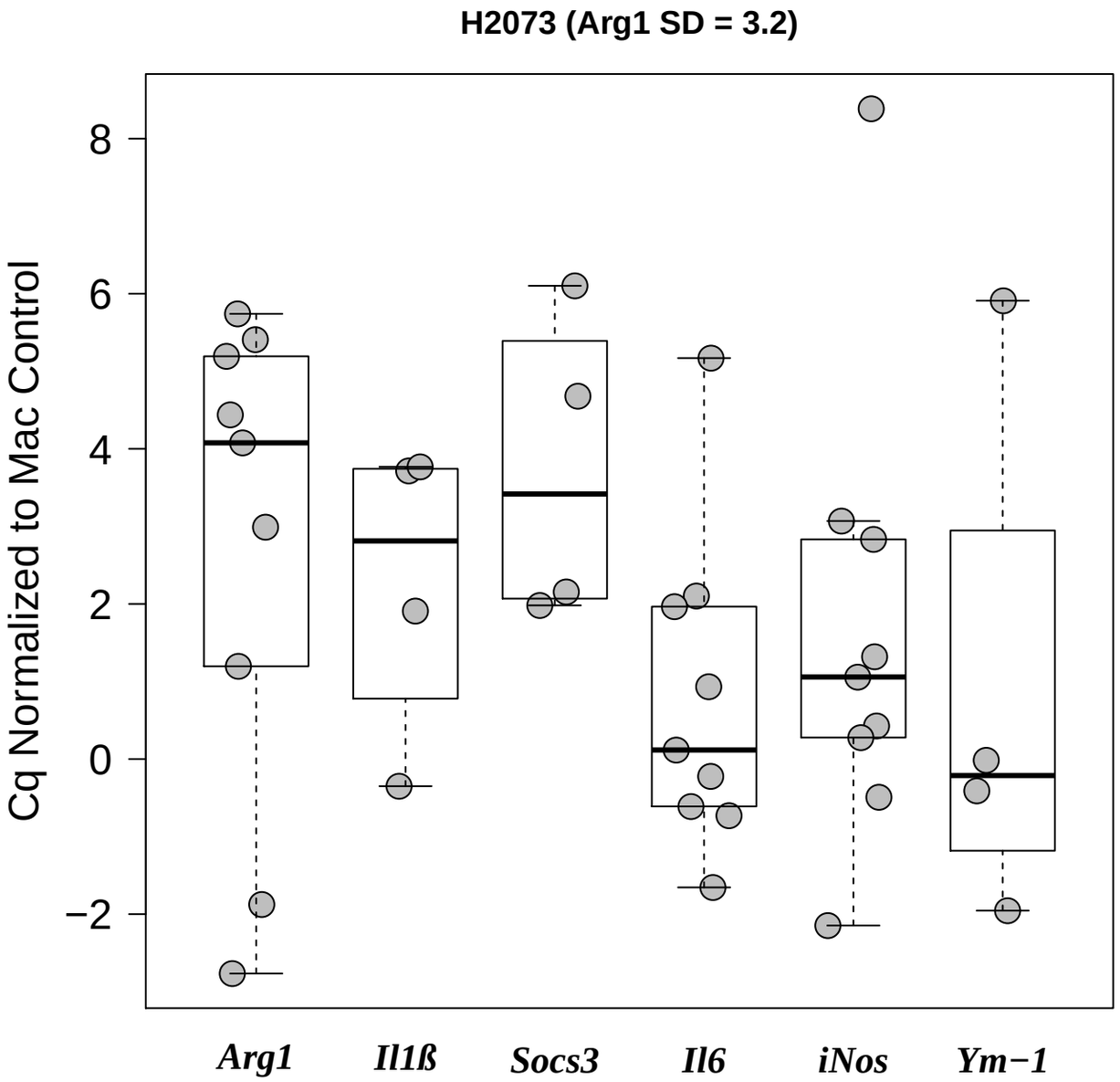

H1944 (Arg1 SD = 2.7)
Cq Normalized to Mac Control
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

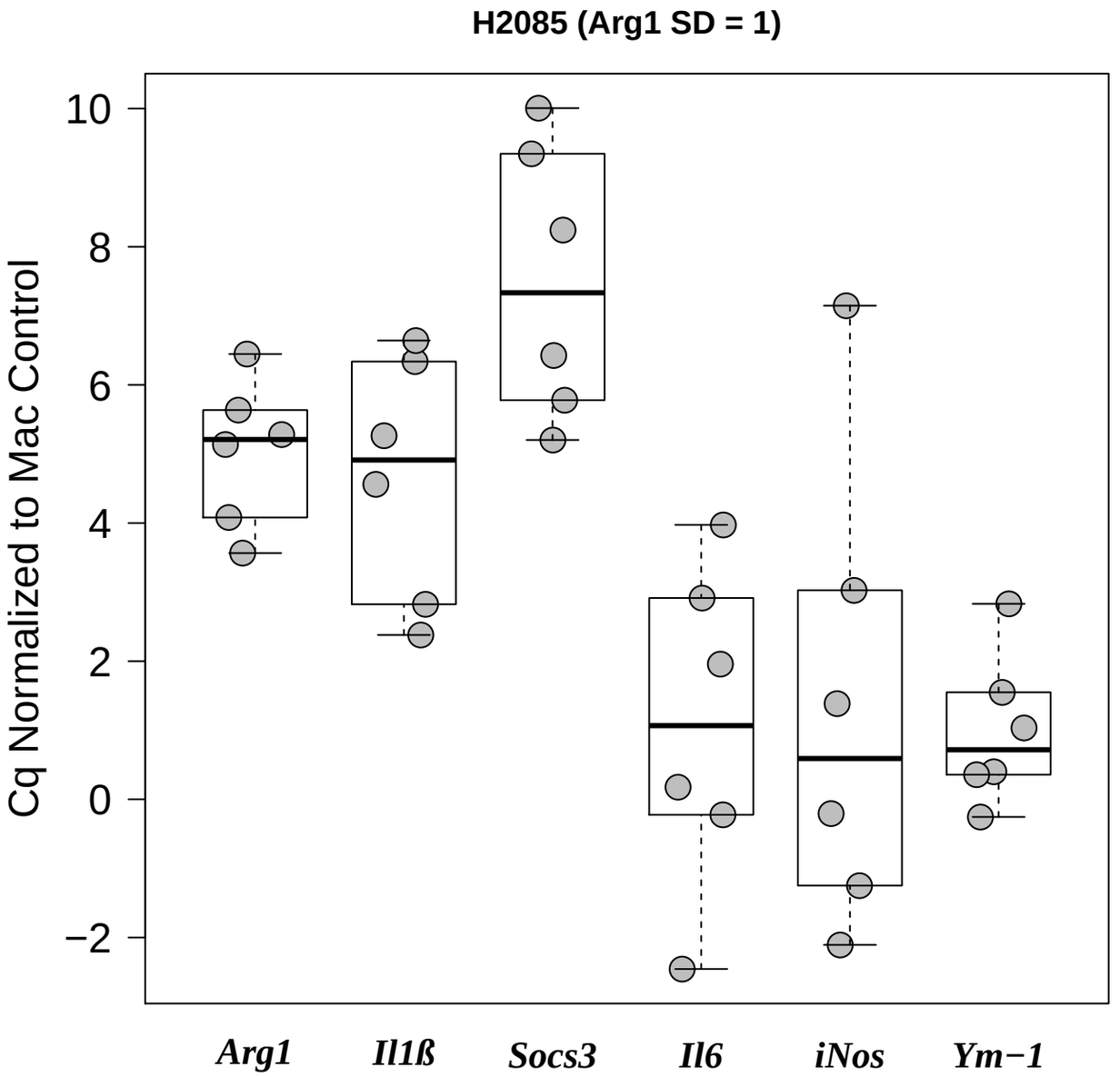

H1975 (Arg1 SD = 2.9)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

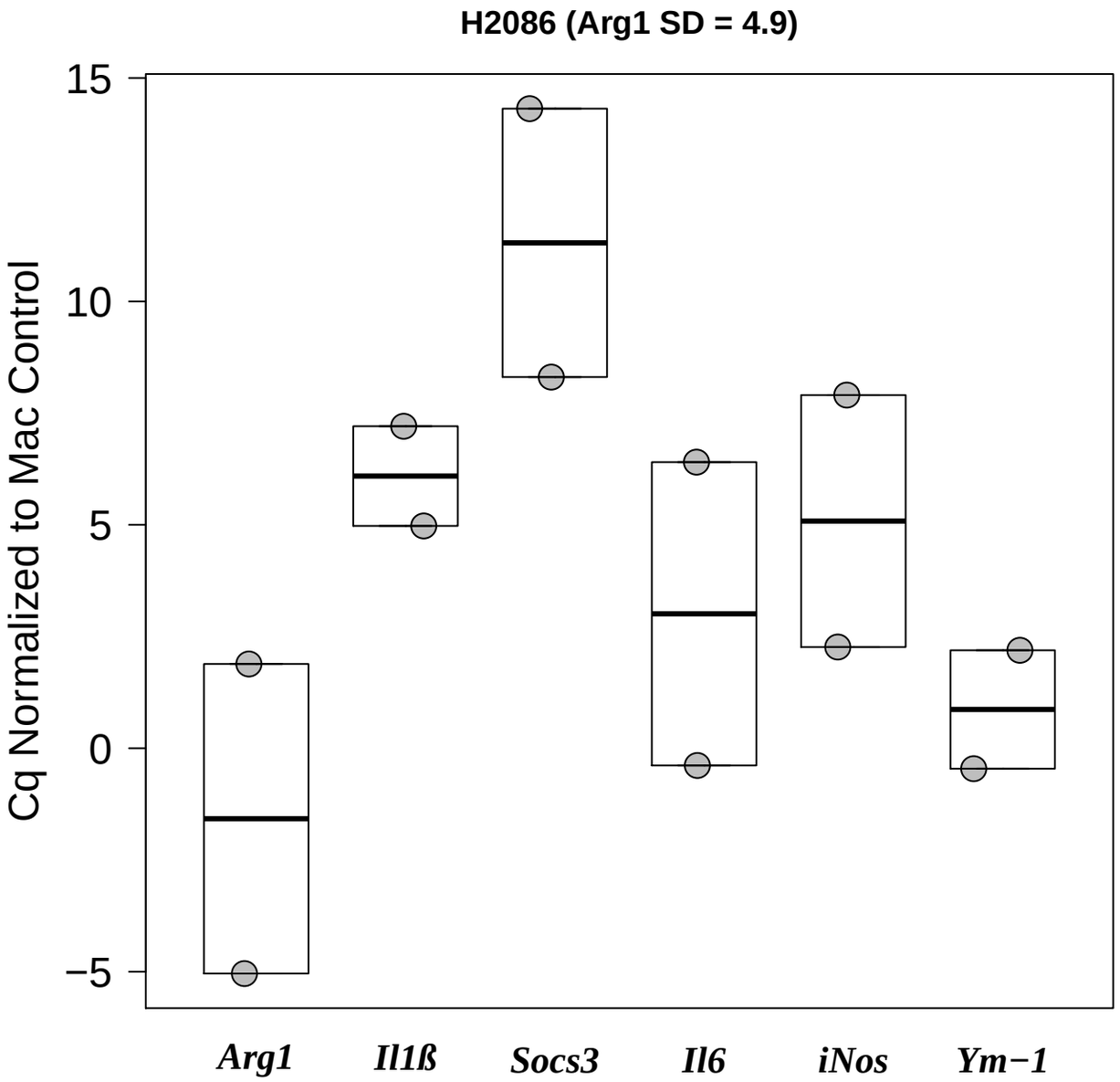

H1993 (Arg1 SD = 2.4)
Cq Normalized to Mac Control
10
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

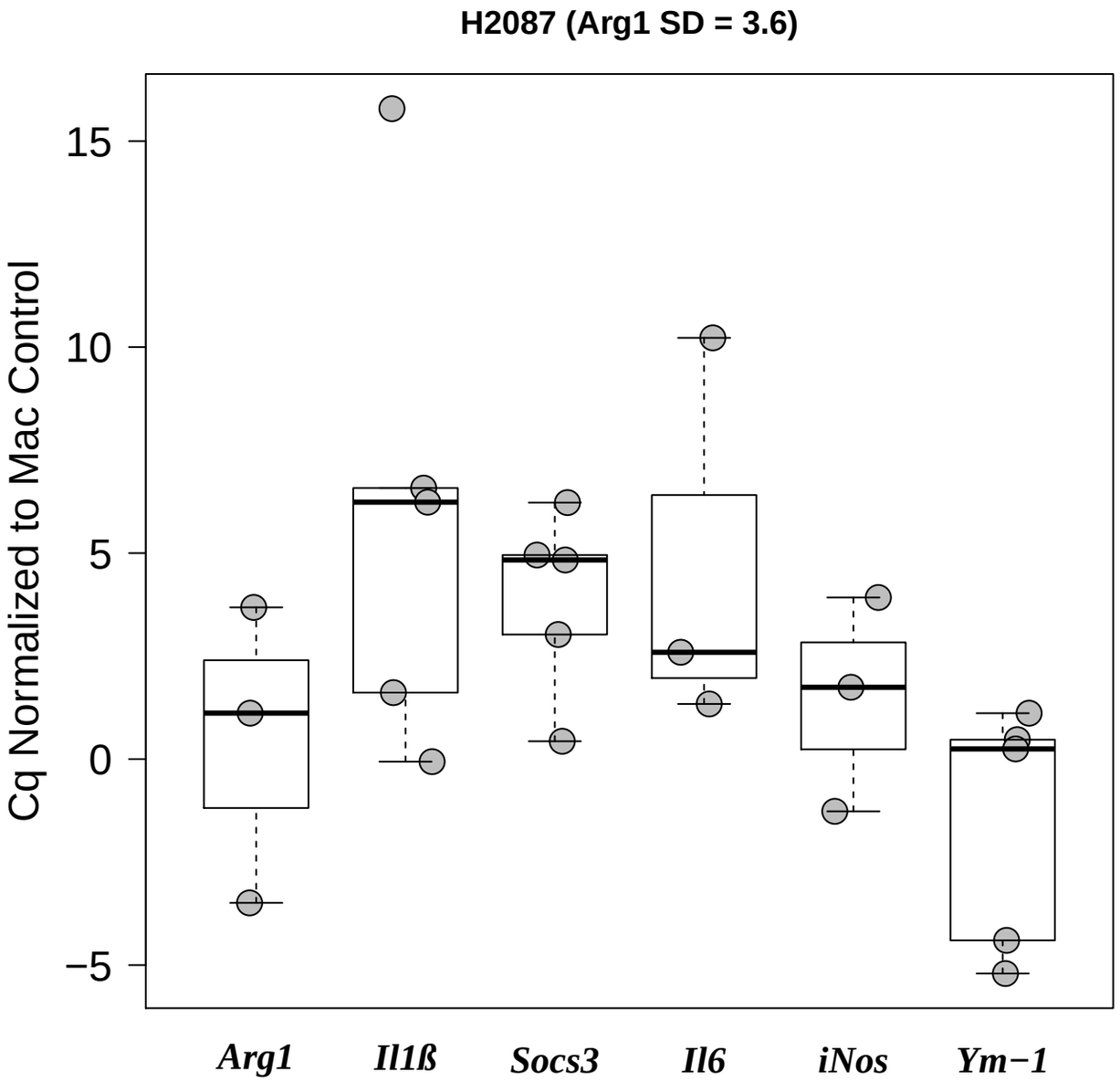

H2009 (Arg1 SD = 1.7)
Cq Normalized to Mac Control
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

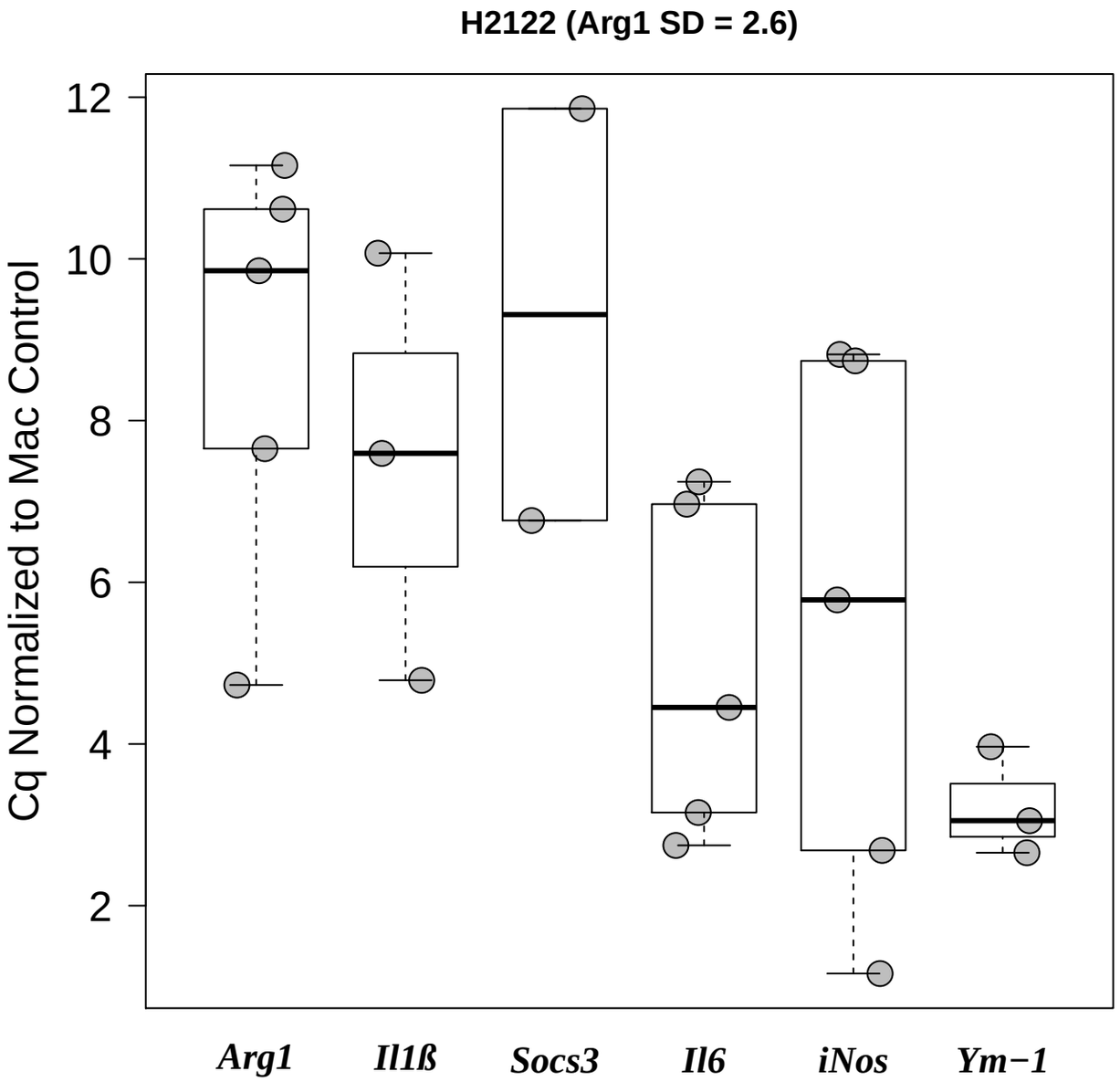

H2030 (Arg1 SD = 2.5)
Cq Normalized to Mac Control
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

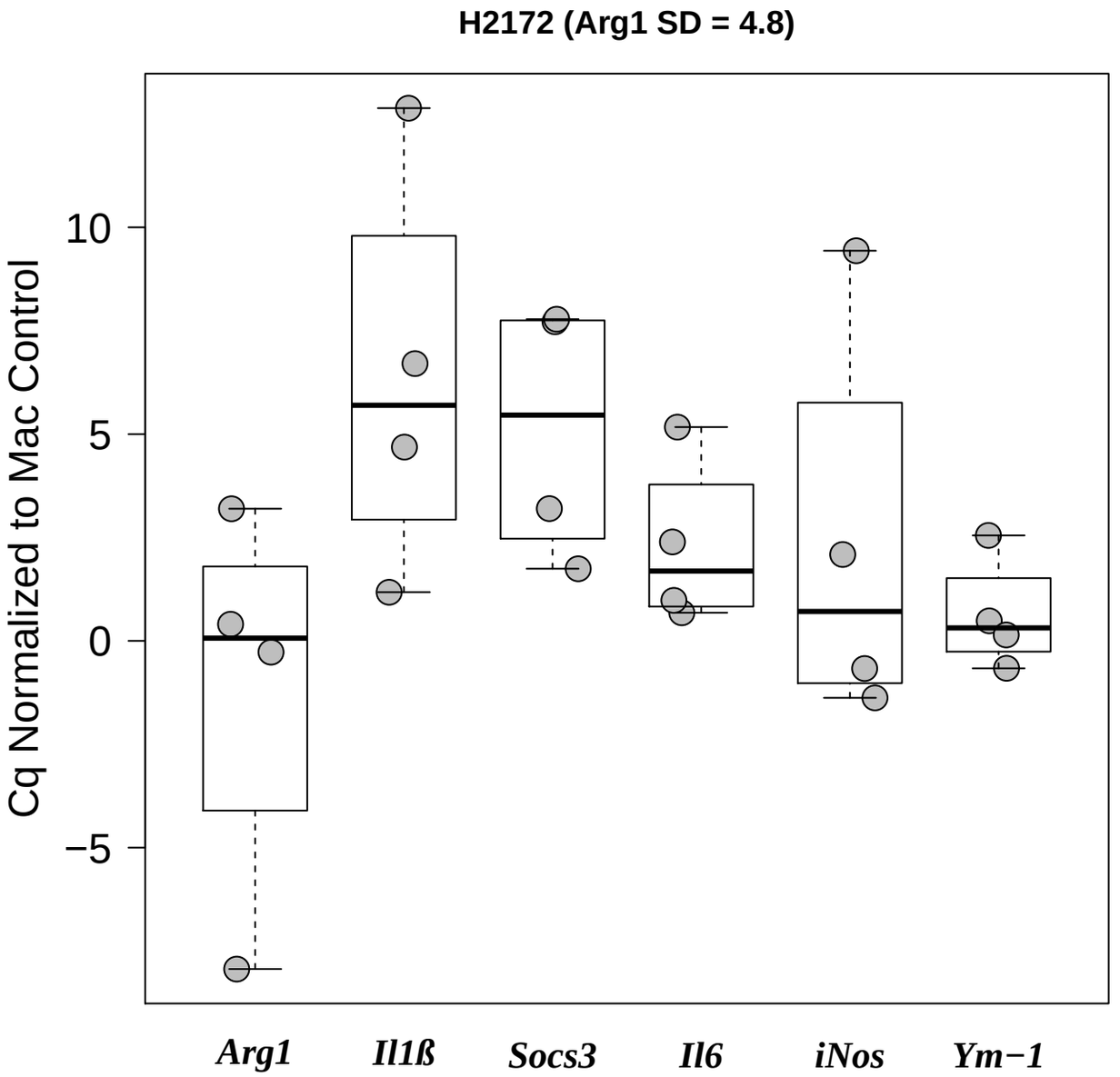

H2073 (Arg1 SD = 3.2)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

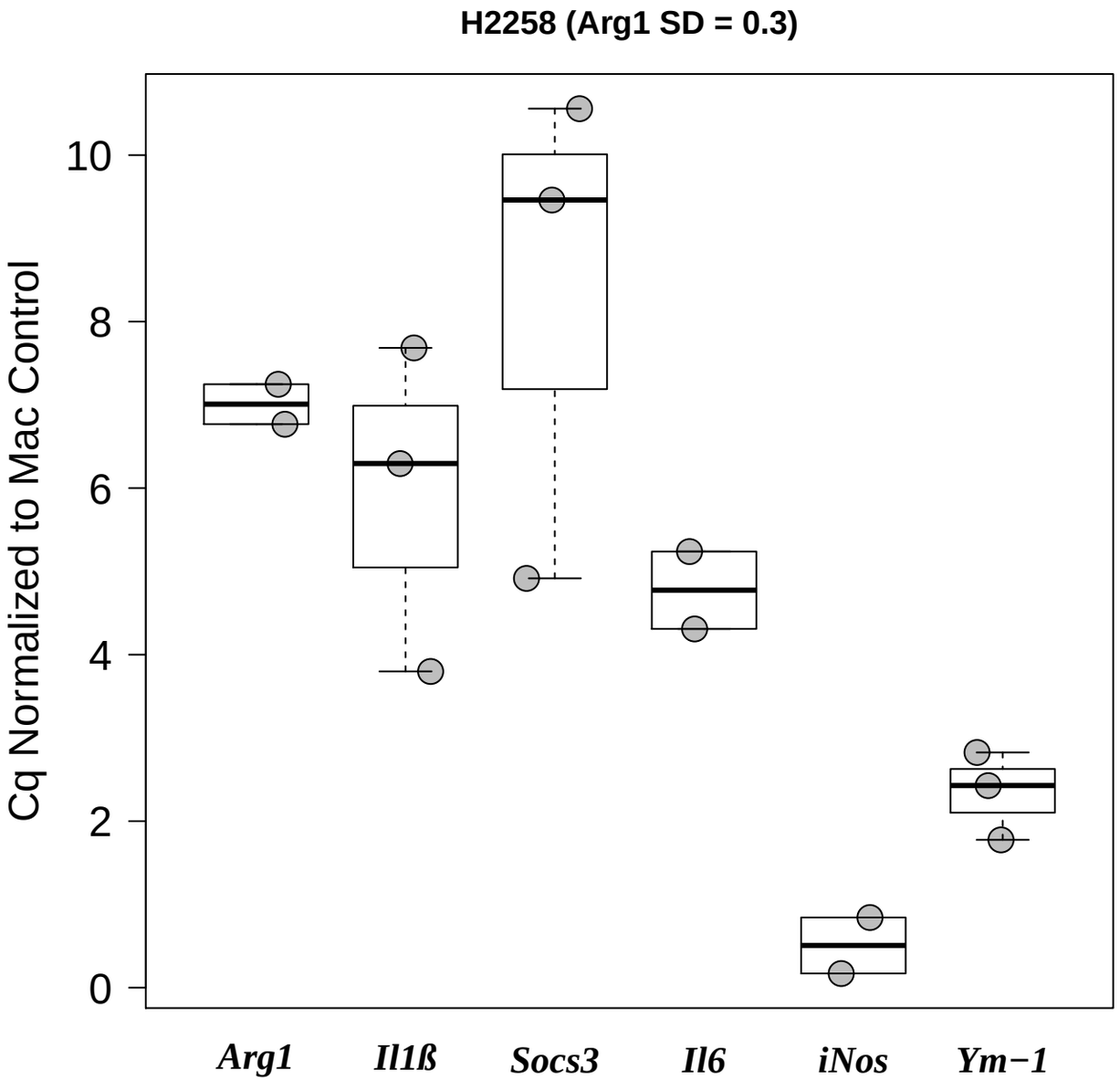

H2085 (Arg1 SD = 1)
Cq Normalized to Mac Control
10
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

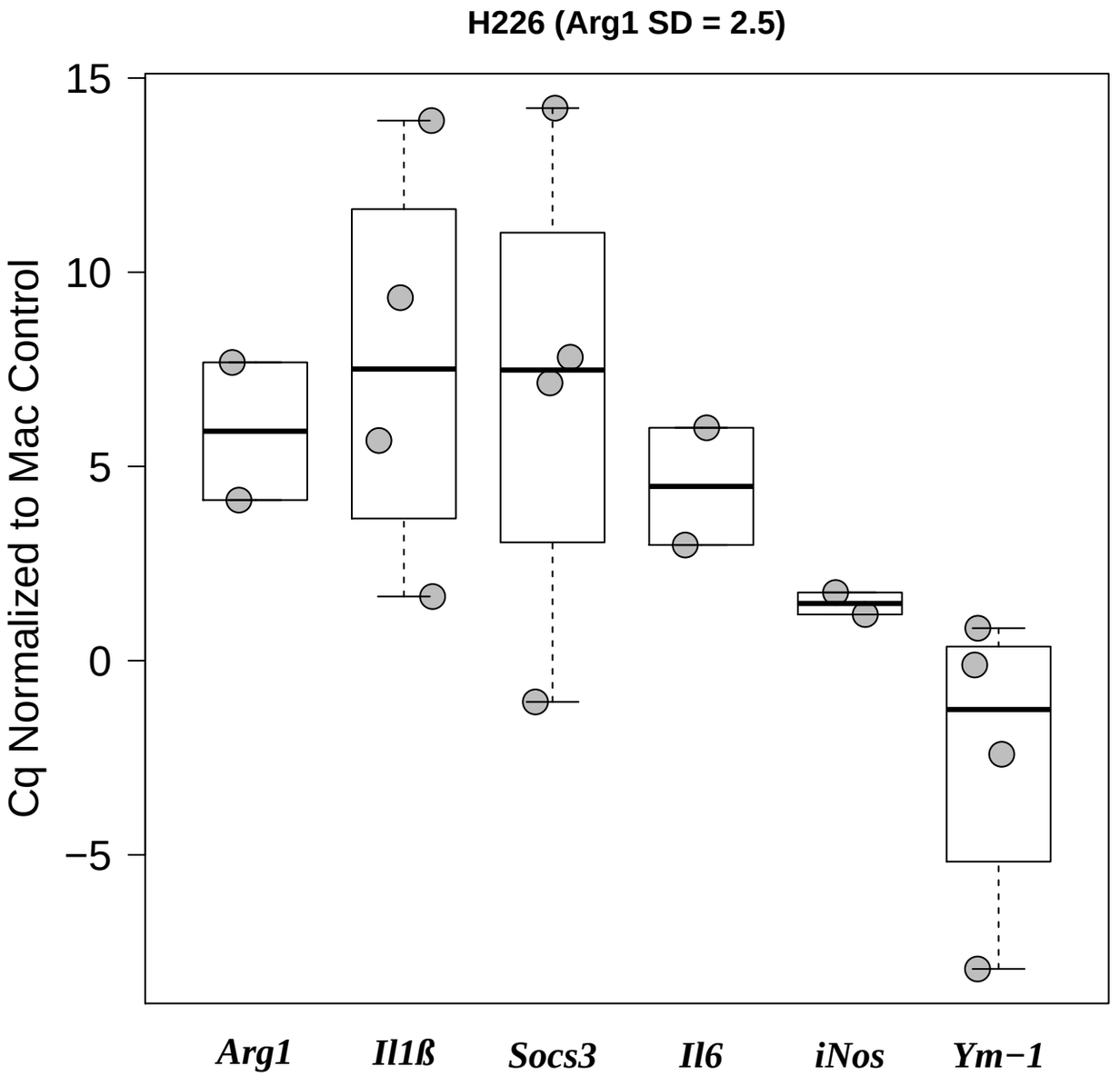

H2086 (Arg1 SD = 4.9)
Cq Normalized to Mac Control
15
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

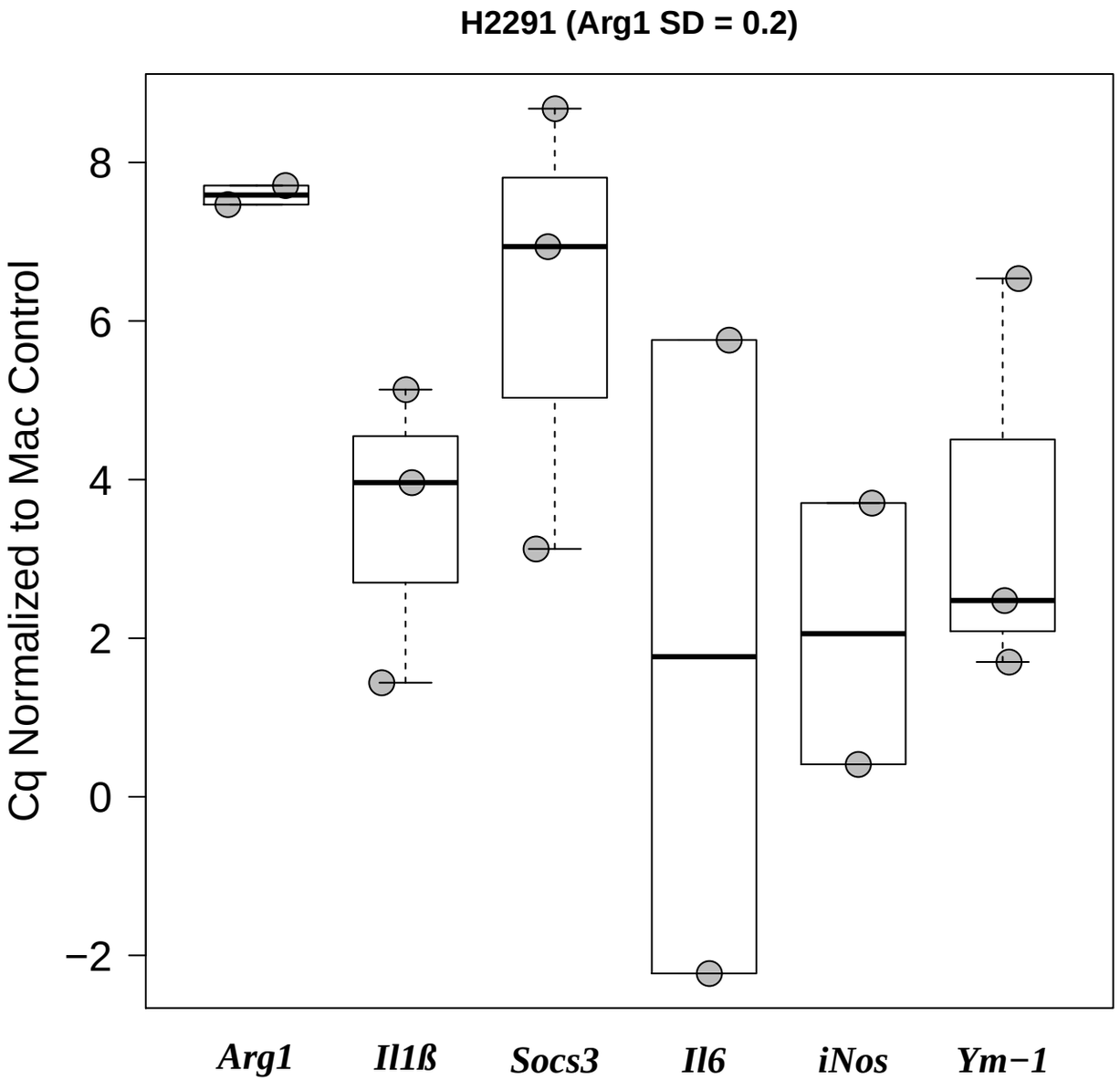

H2087 (Arg1 SD = 3.6)
Cq Normalized to Mac Control
15
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

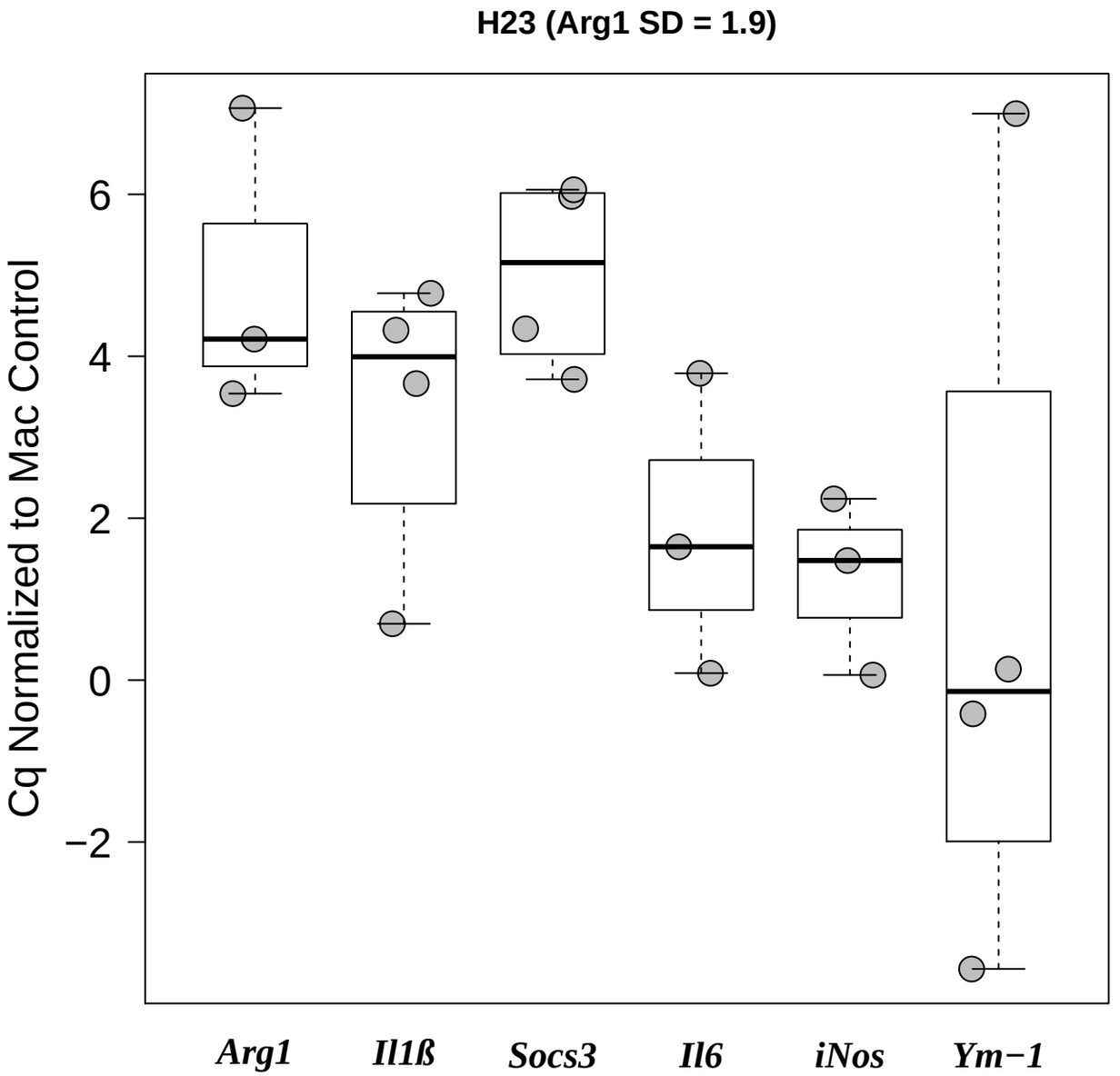

H2122 (Arg1 SD = 2.6)
Cq Normalized to Mac Control
12
10
8
6
4
2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

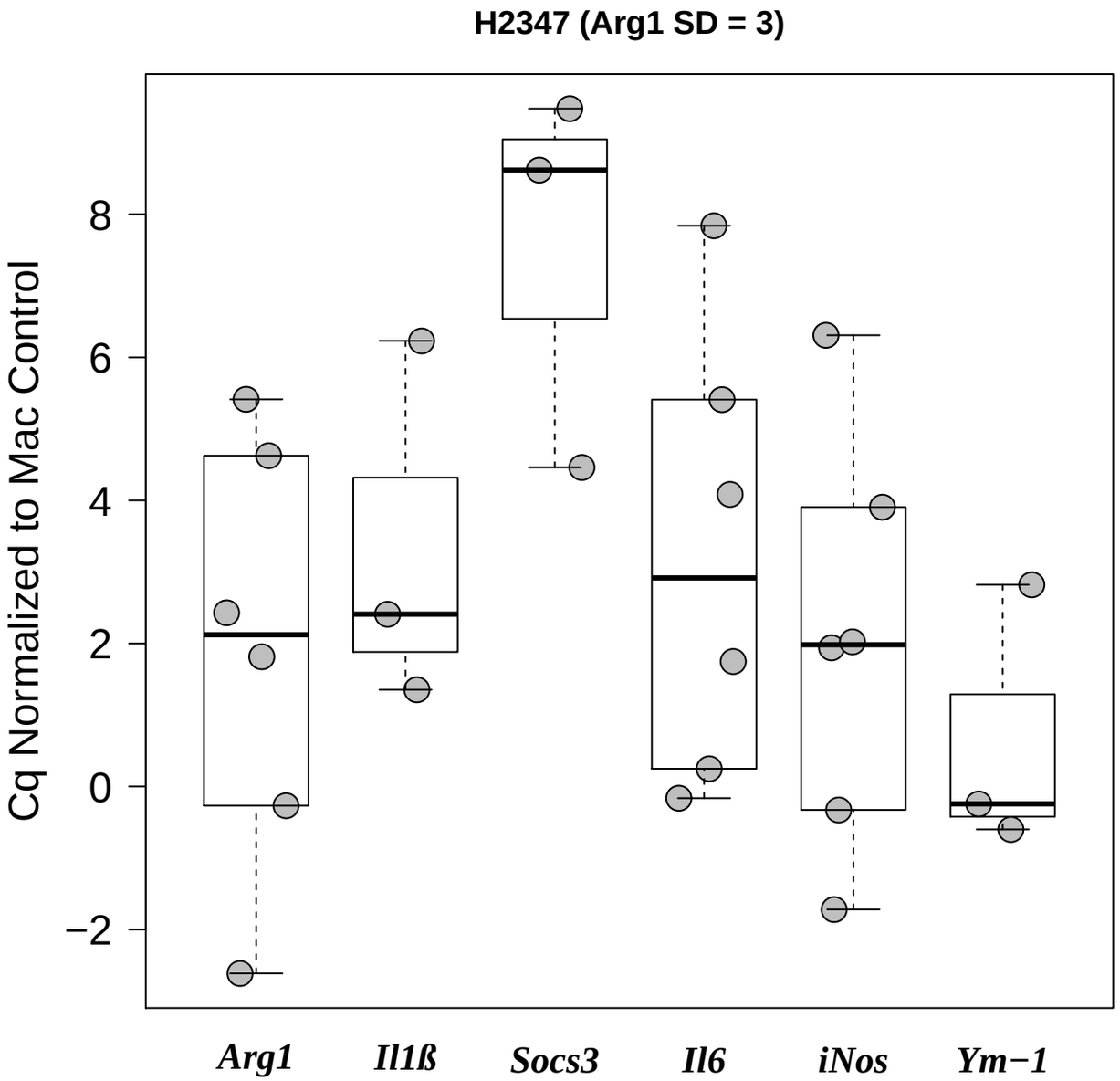

H2172 (Arg1 SD = 4.8)
Cq Normalized to Mac Control
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

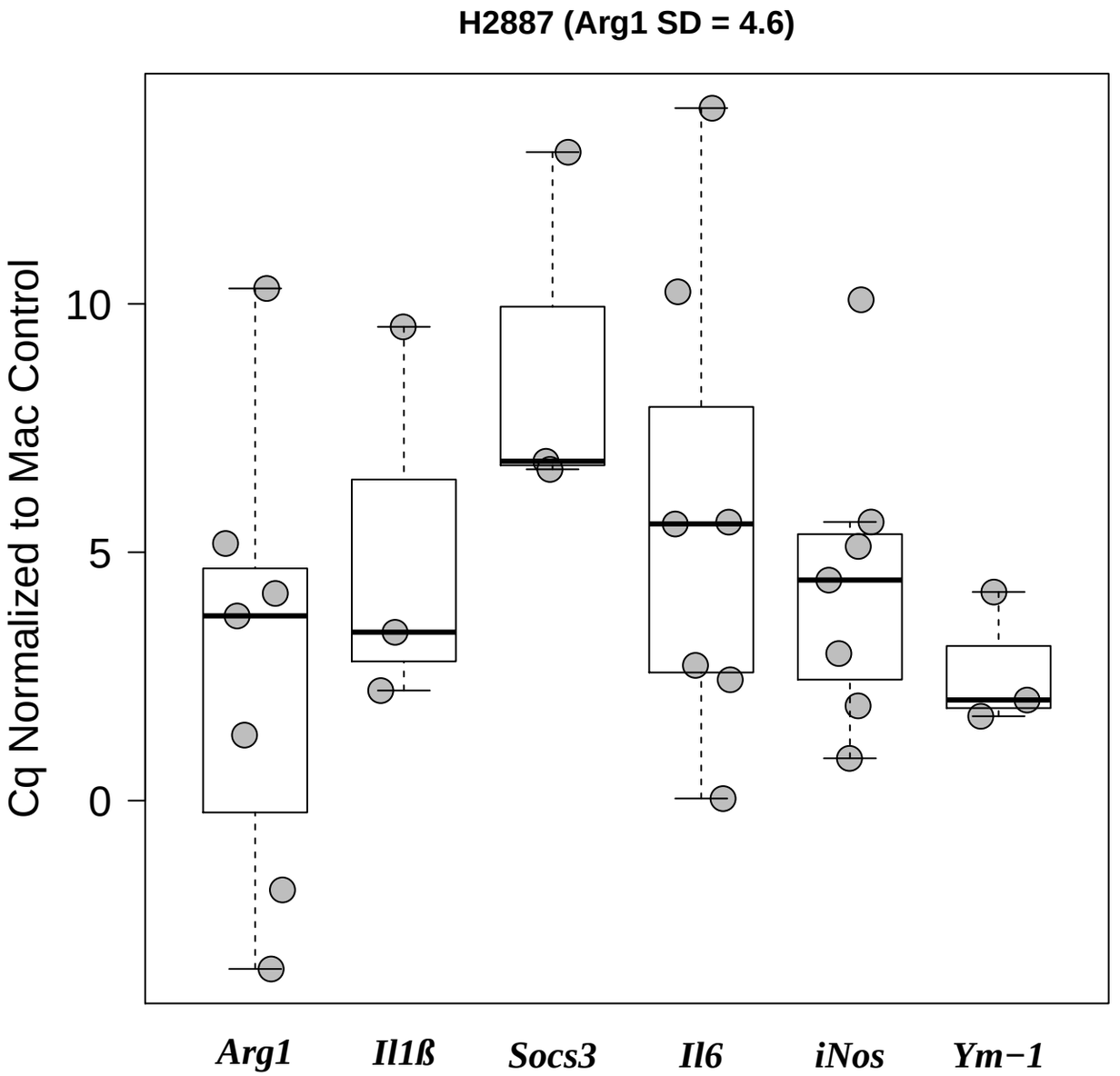

H2258 (Arg1 SD = 0.3)
Cq Normalized to Mac Control
0
2
4
6
8
10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

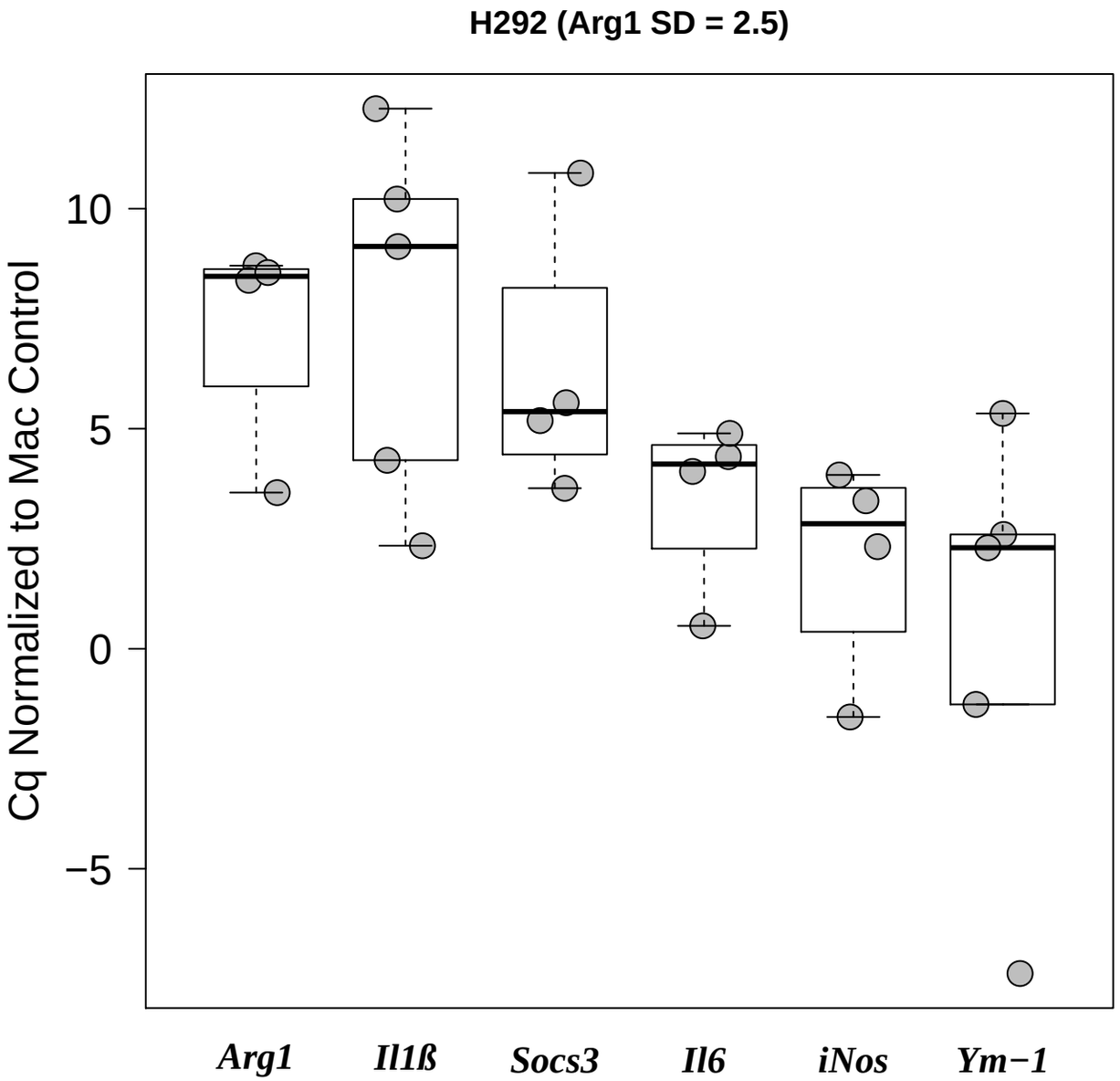

H226 (Arg1 SD = 2.5)
Cq Normalized to Mac Control
−5
0
5
10
15
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

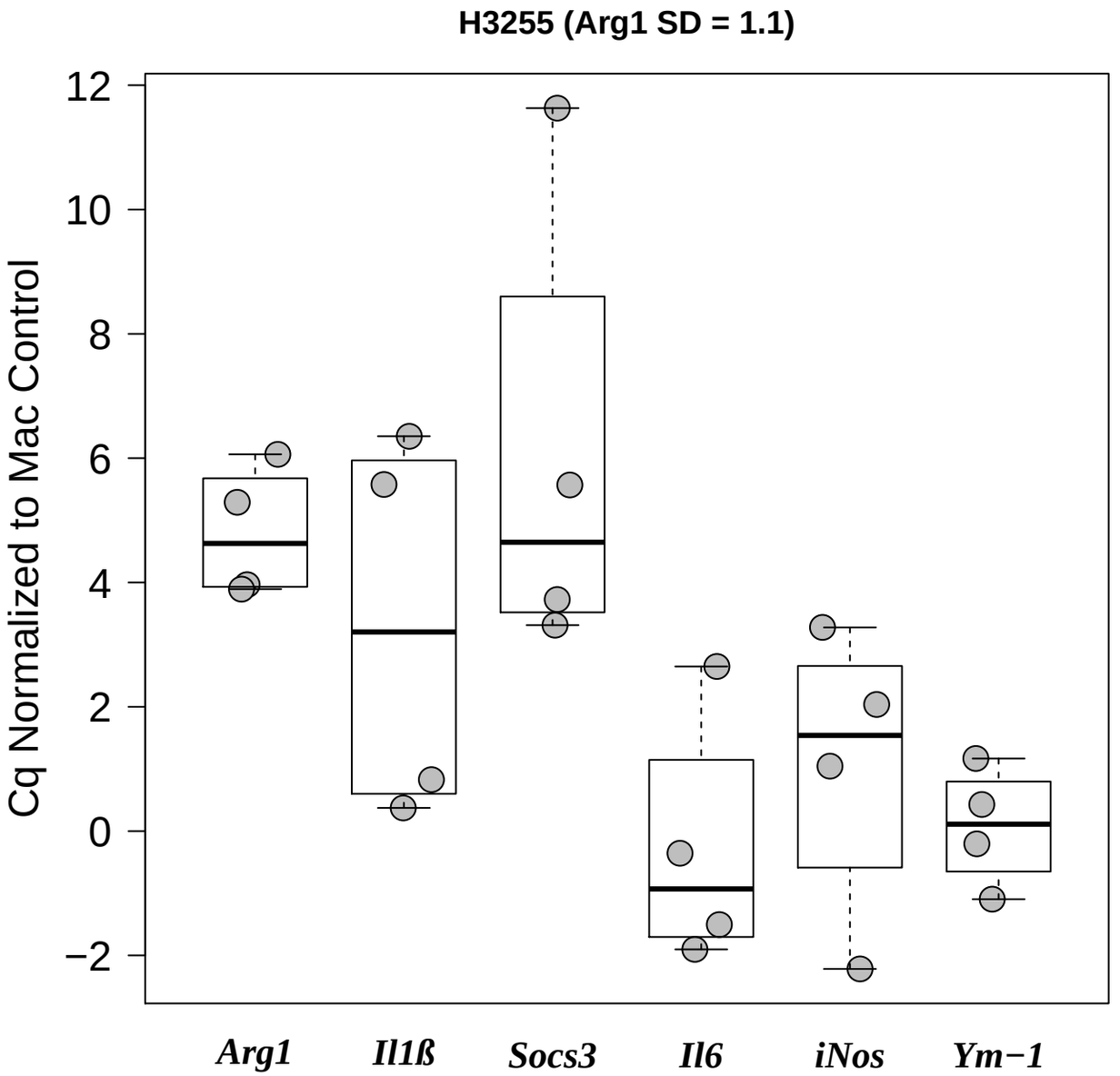

H2291 (Arg1 SD = 0.2)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

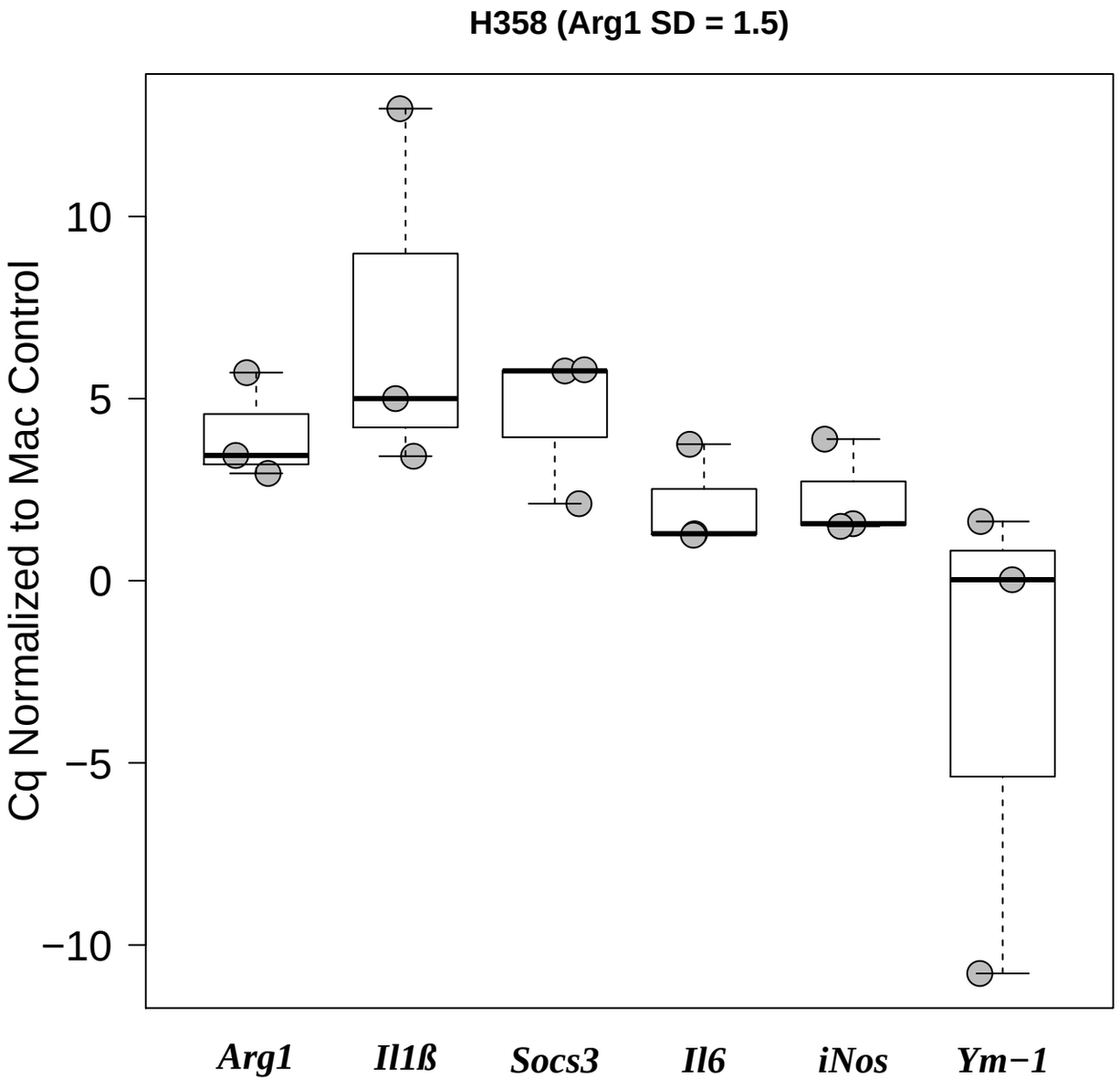

H23 (Arg1 SD = 1.9)
Cq Normalized to Mac Control
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

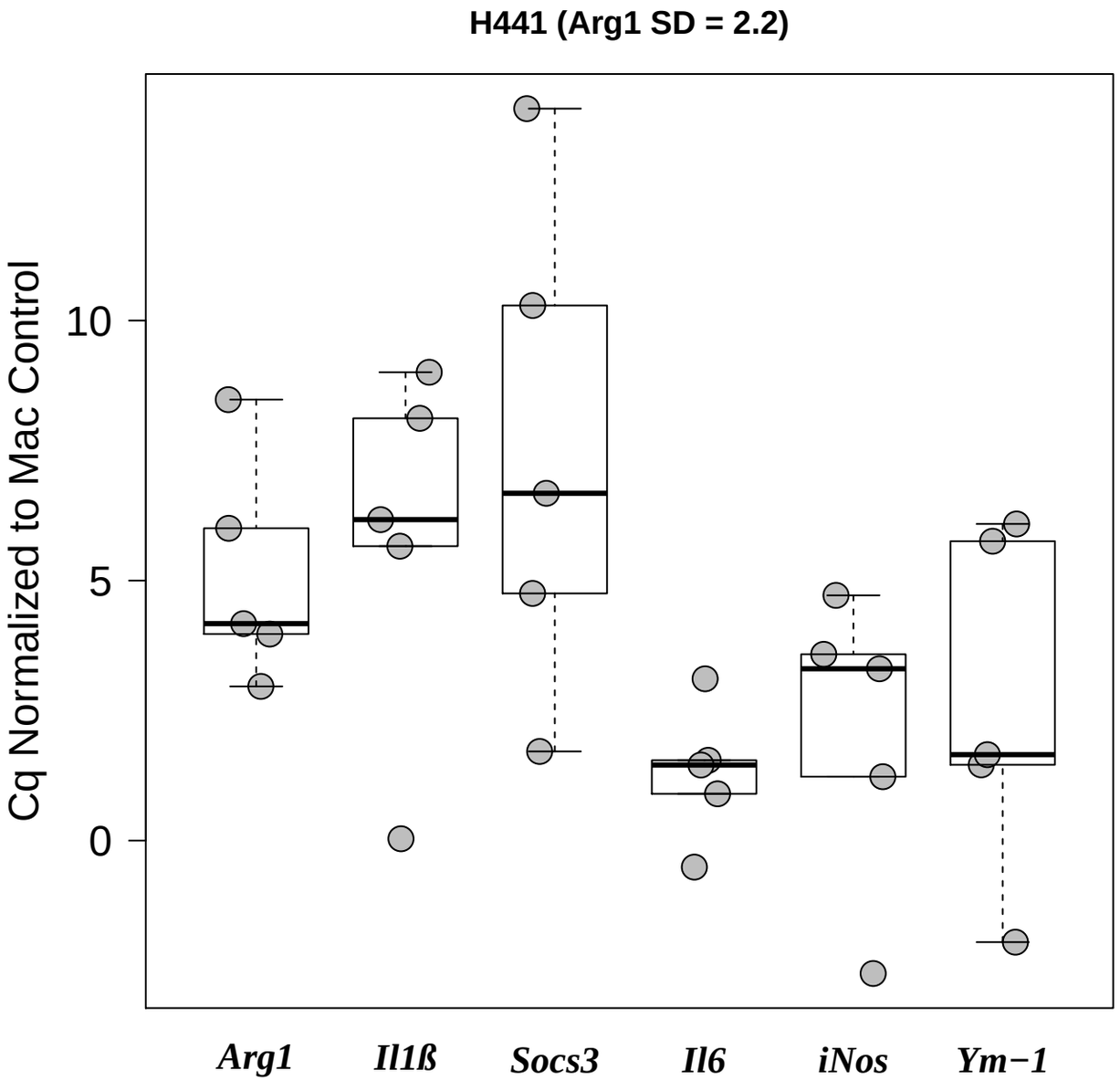

H2347 (Arg1 SD = 3)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

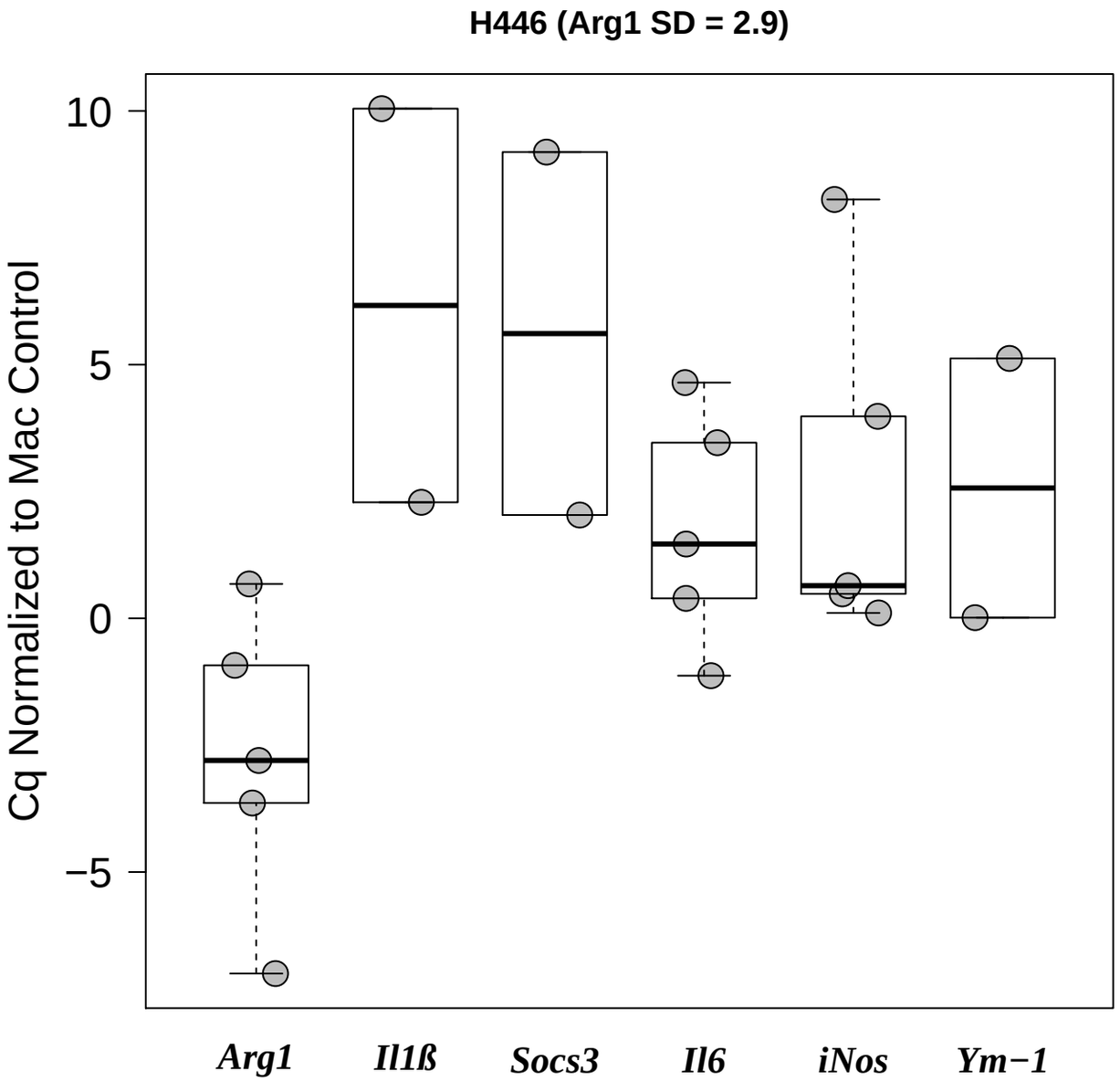

H2887 (Arg1 SD = 4.6)
Cq Normalized to Mac Control
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

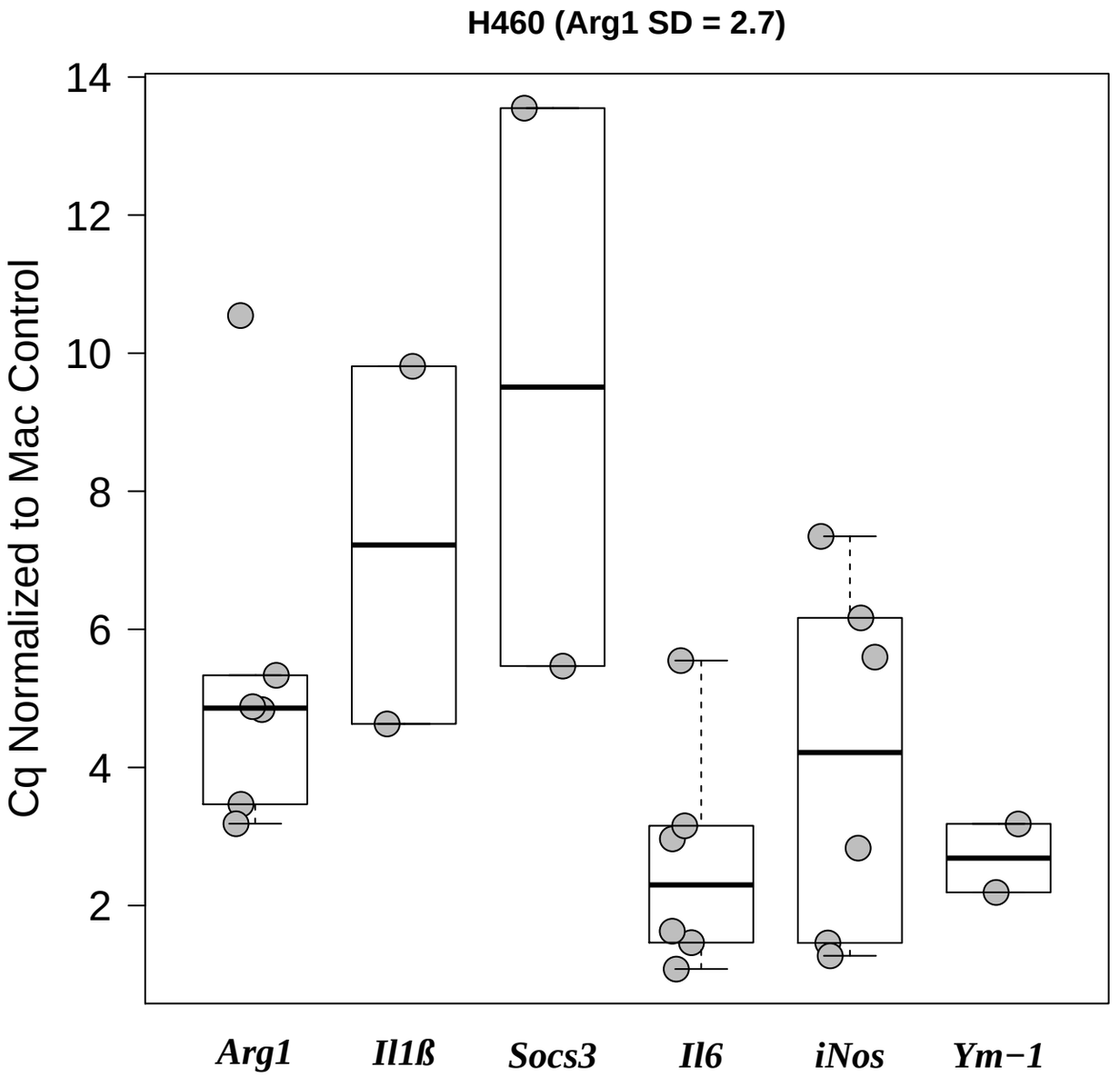

H292 (Arg1 SD = 2.5)
Cq Normalized to Mac Control
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

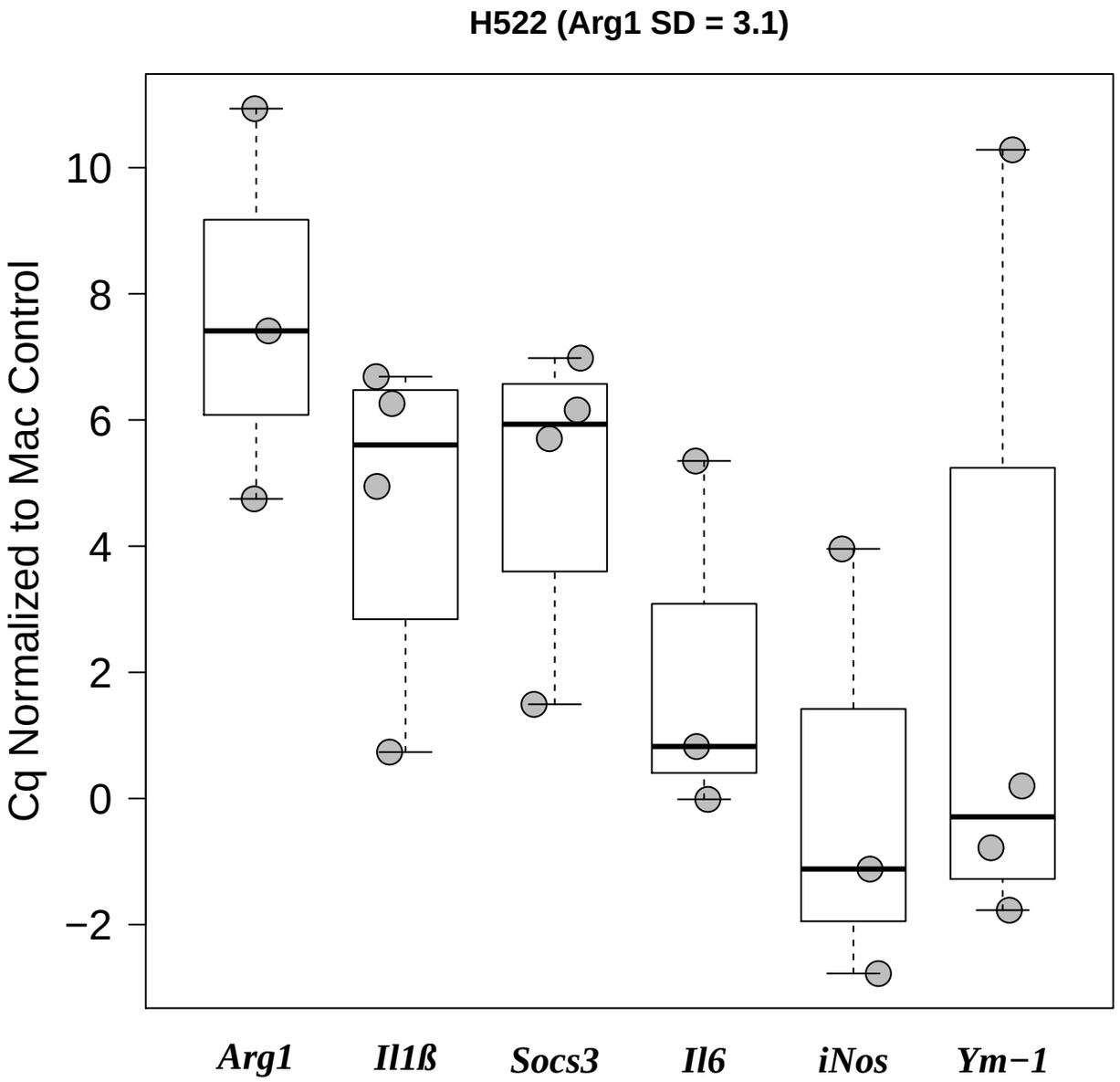

H3255 (Arg1 SD = 1.1)
Cq Normalized to Mac Control
12
10
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

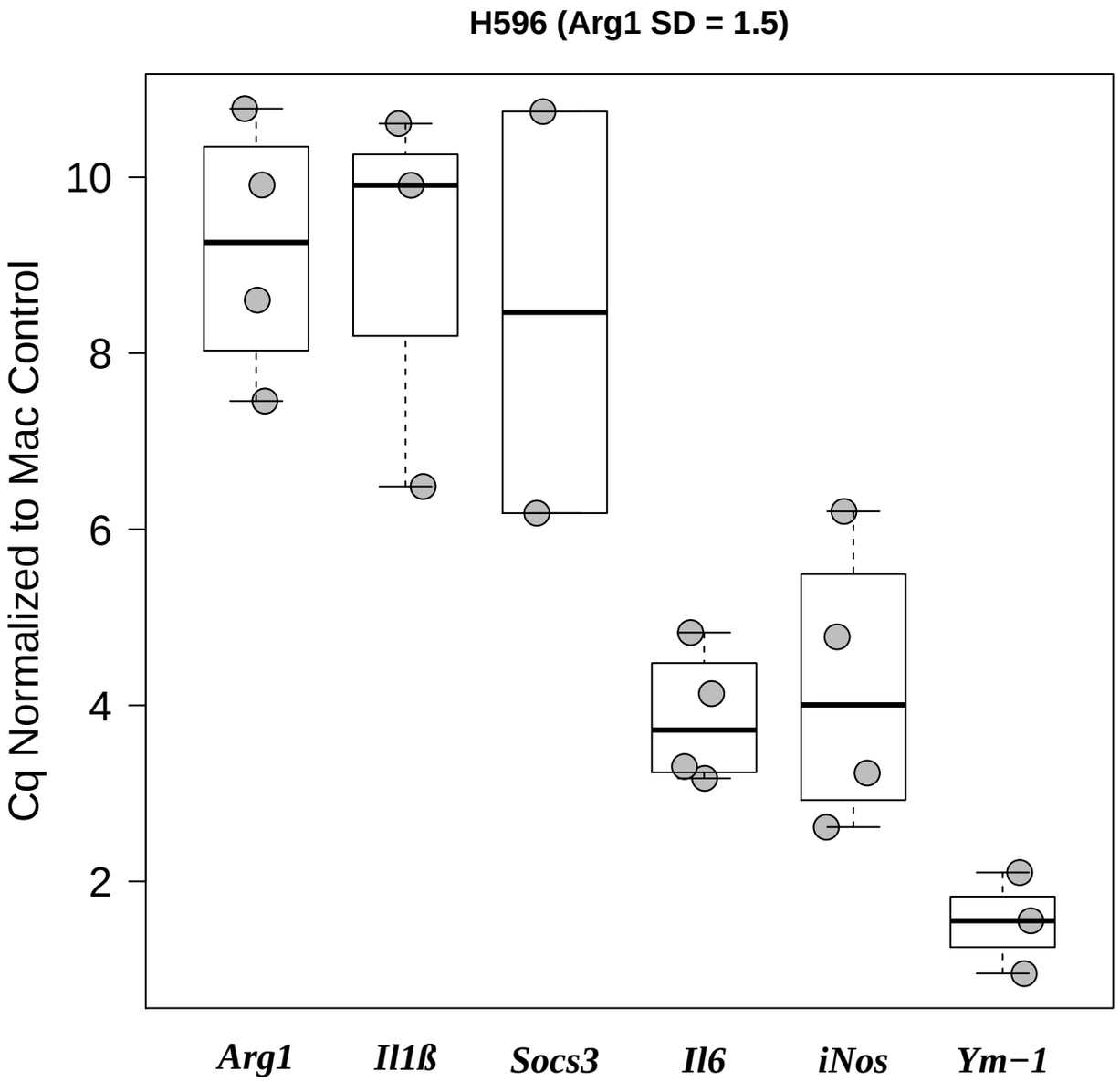

H358 (Arg1 SD = 1.5)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

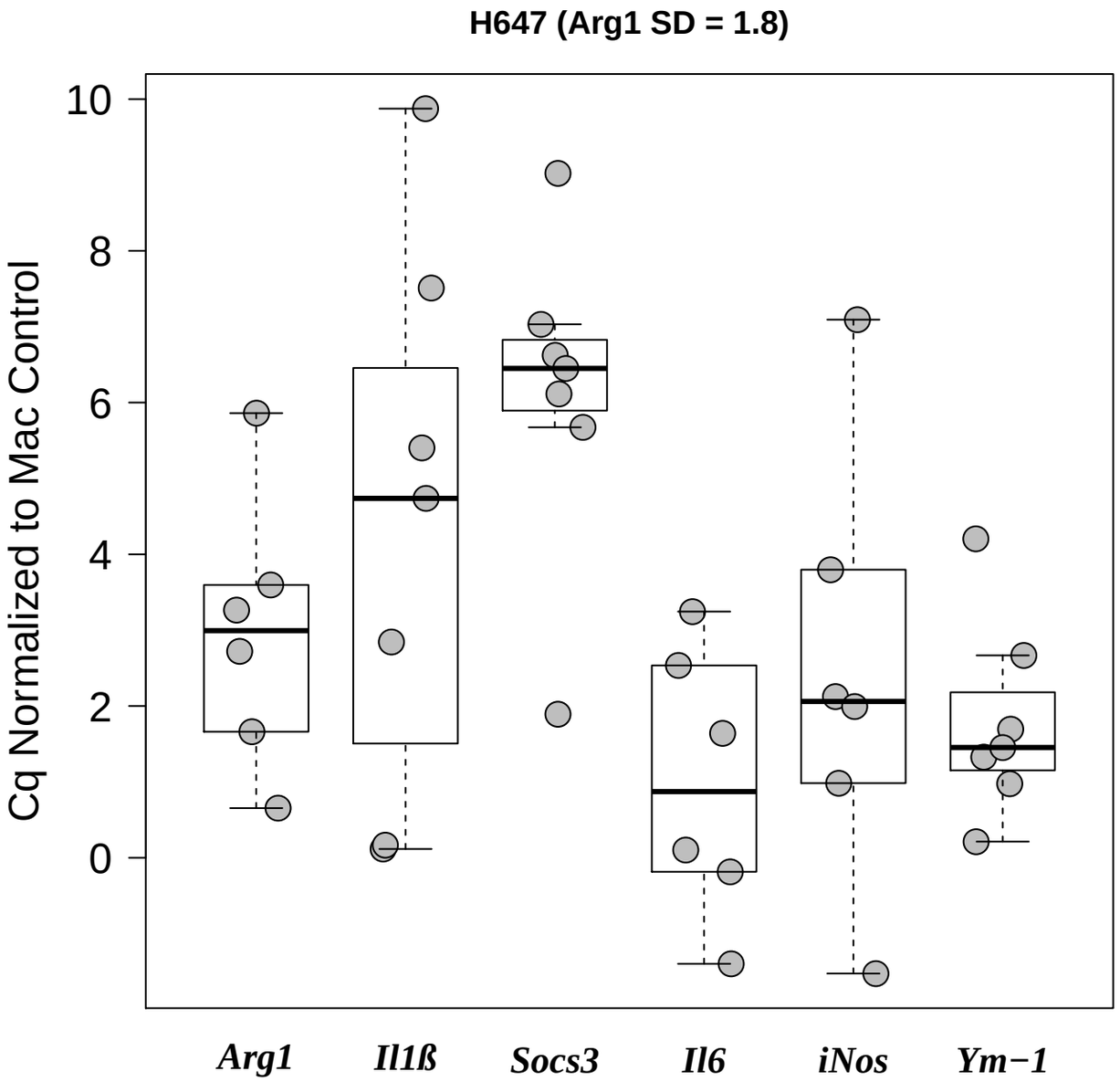

H441 (Arg1 SD = 2.2)
Cq Normalized to Mac Control
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

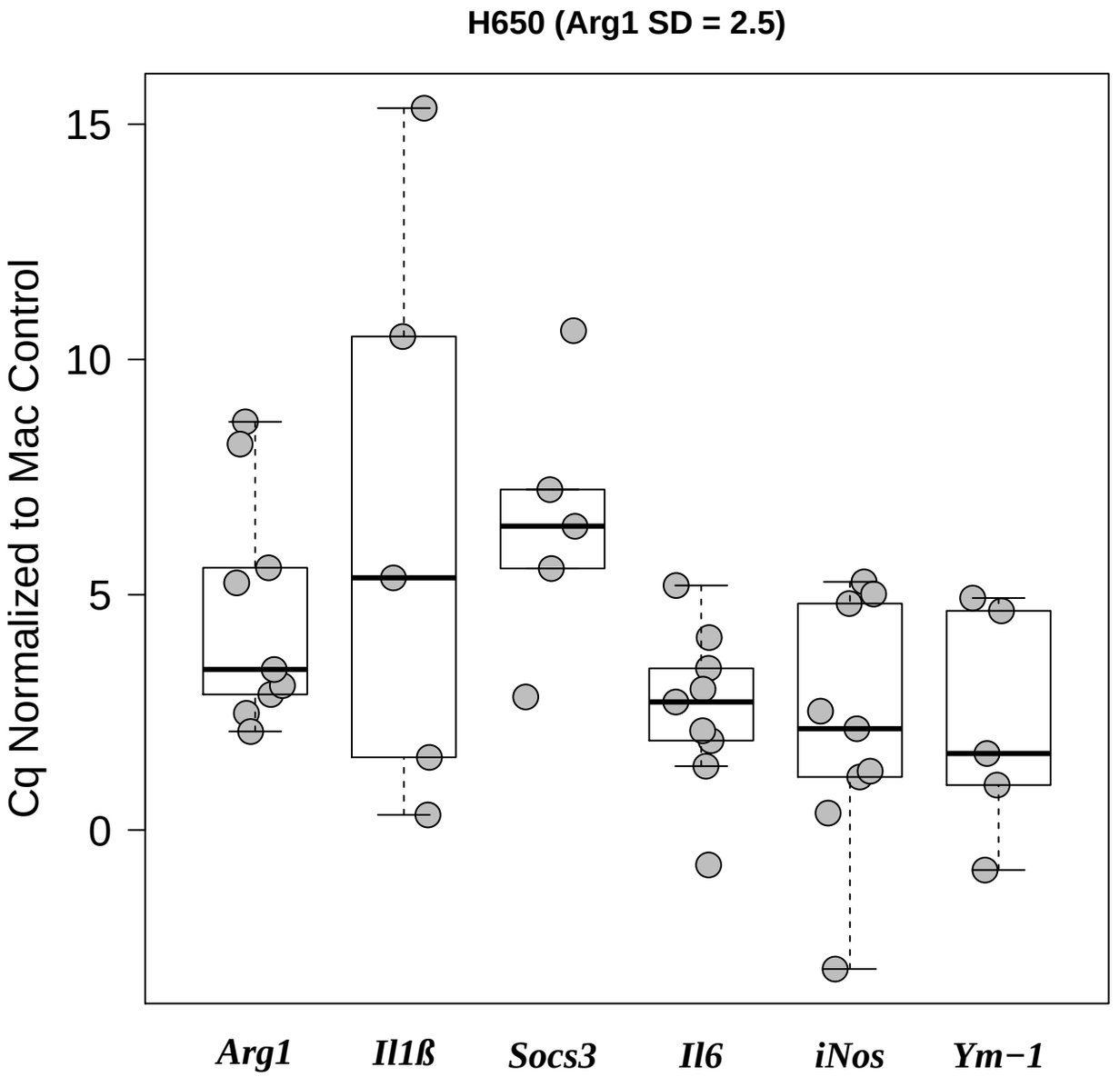

H446 (Arg1 SD = 2.9)
Cq Normalized to Mac Control
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

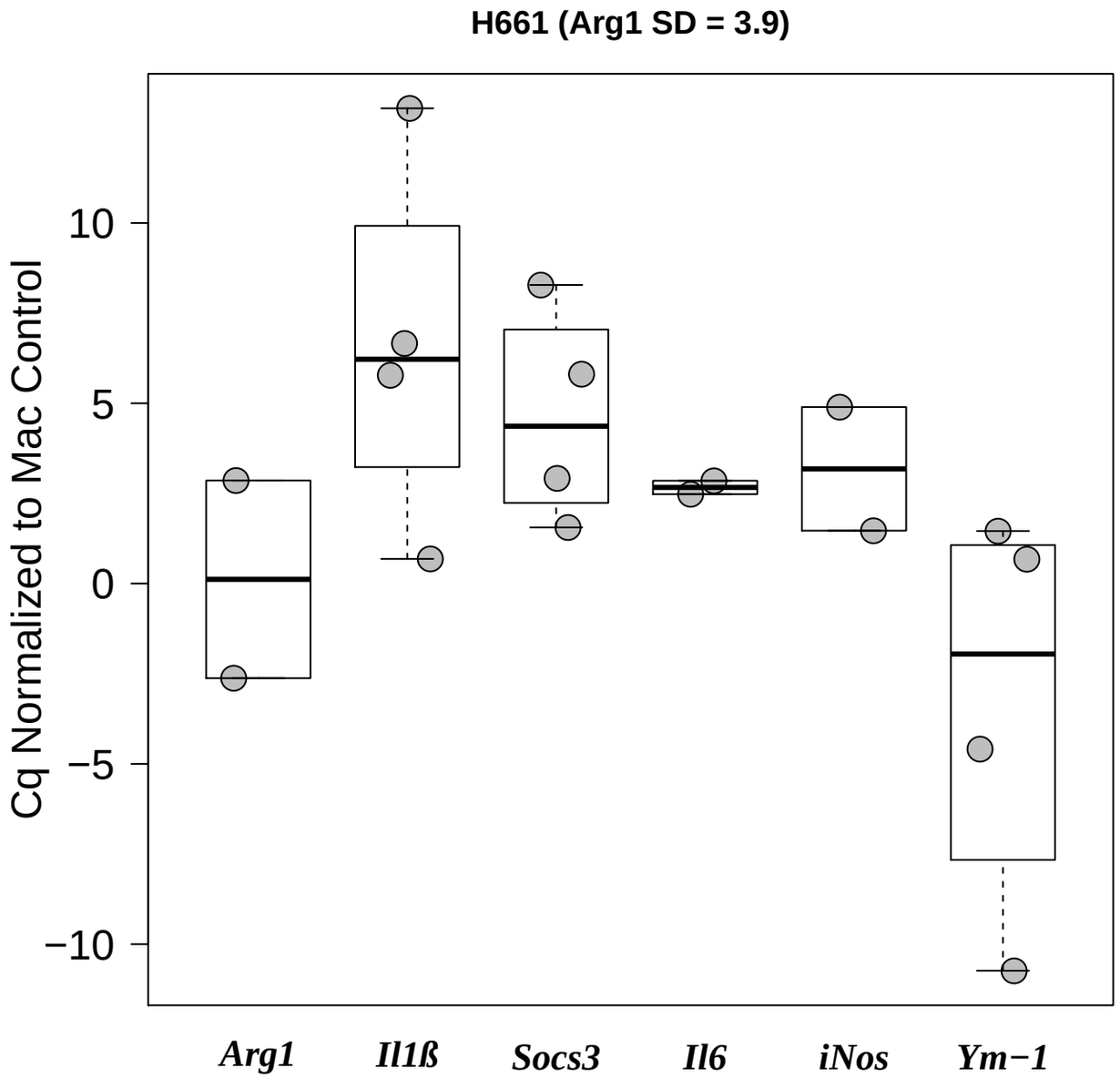

H460 (Arg1 SD = 2.7)
Cq Normalized to Mac Control
14
12
10
8
6
4
2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

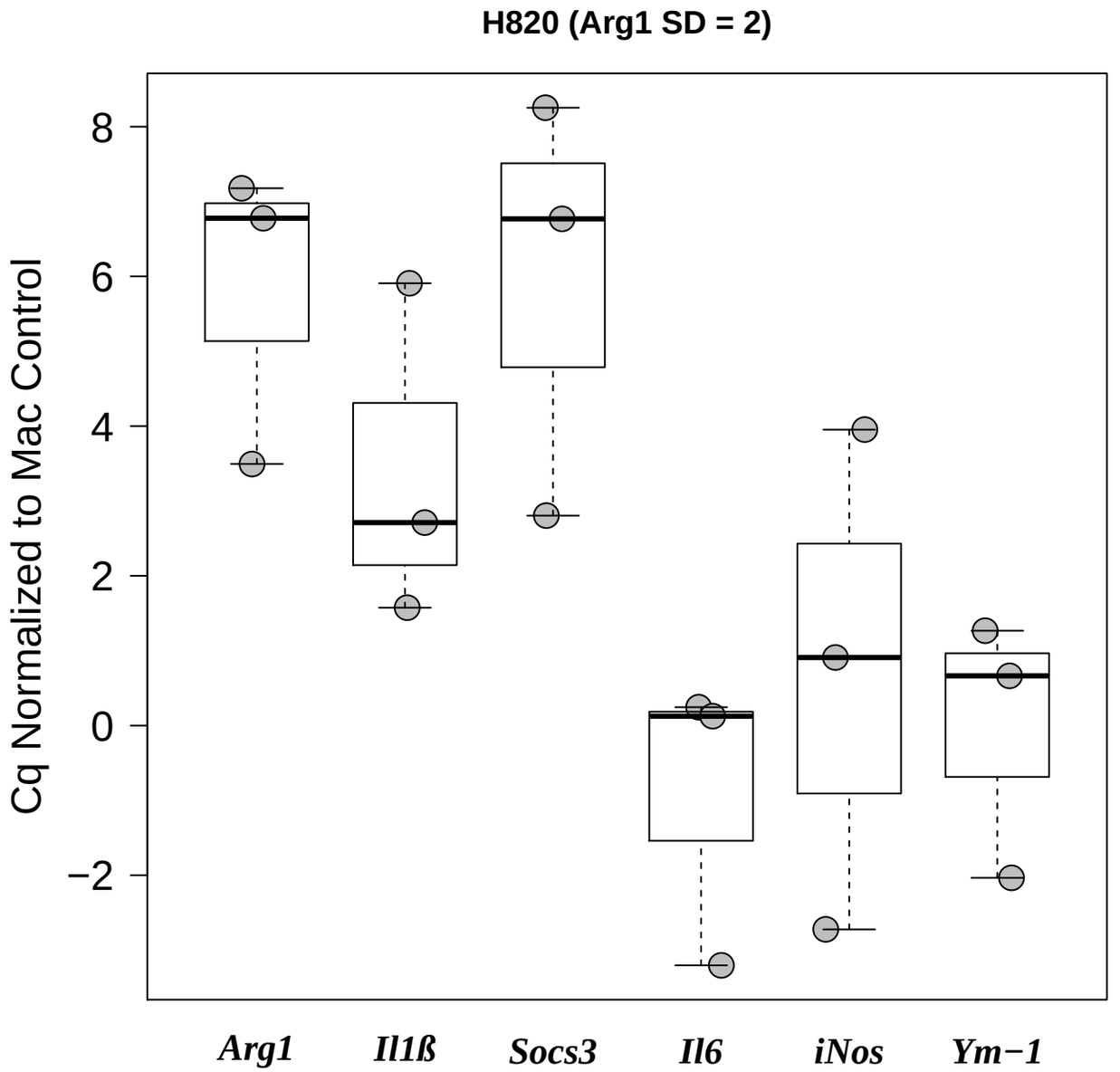

H522 (Arg1 SD = 3.1)
Cq Normalized to Mac Control
10
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

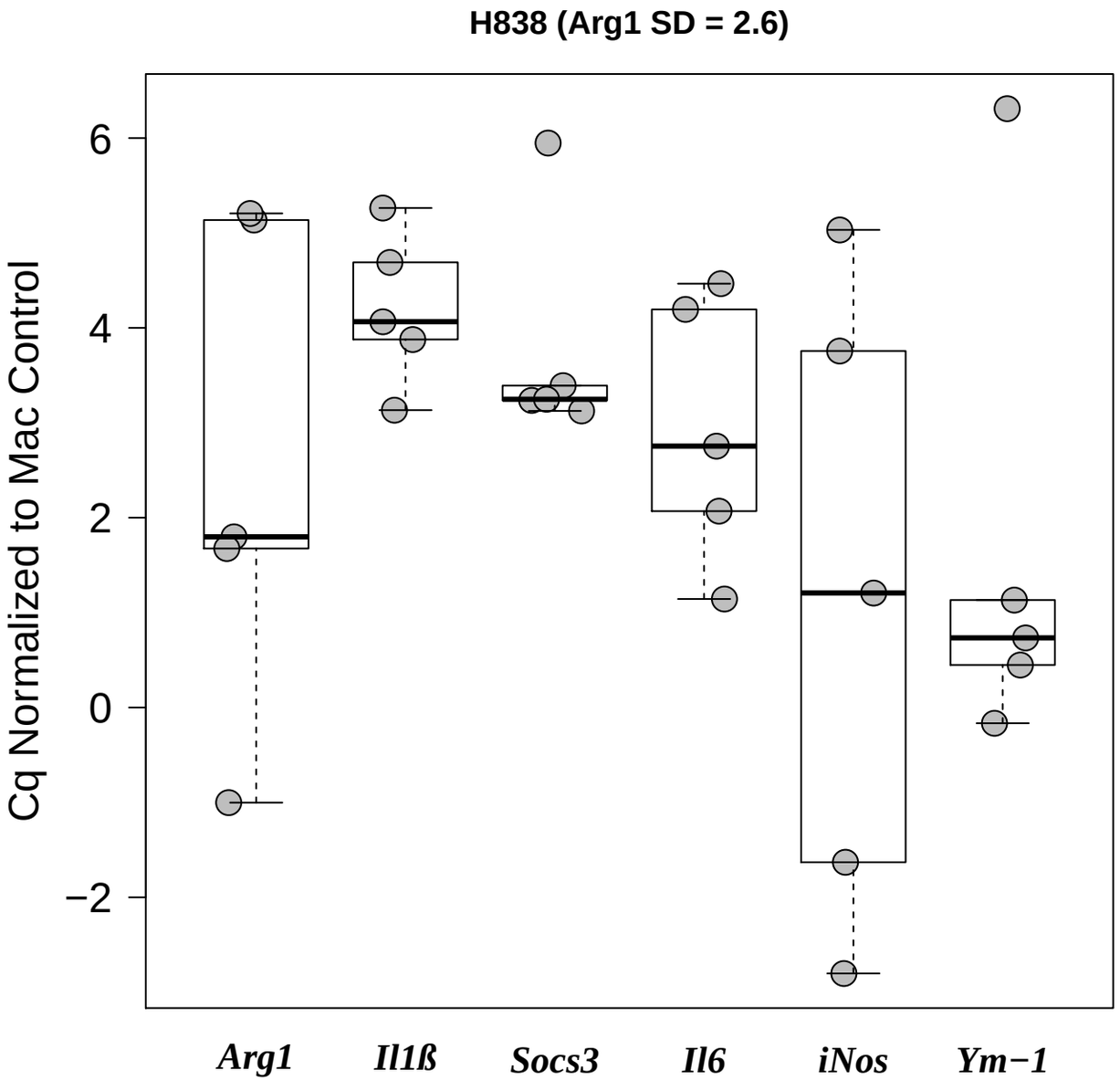

H596 (Arg1 SD = 1.5)
Cq Normalized to Mac Control
10
8
6
4
2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

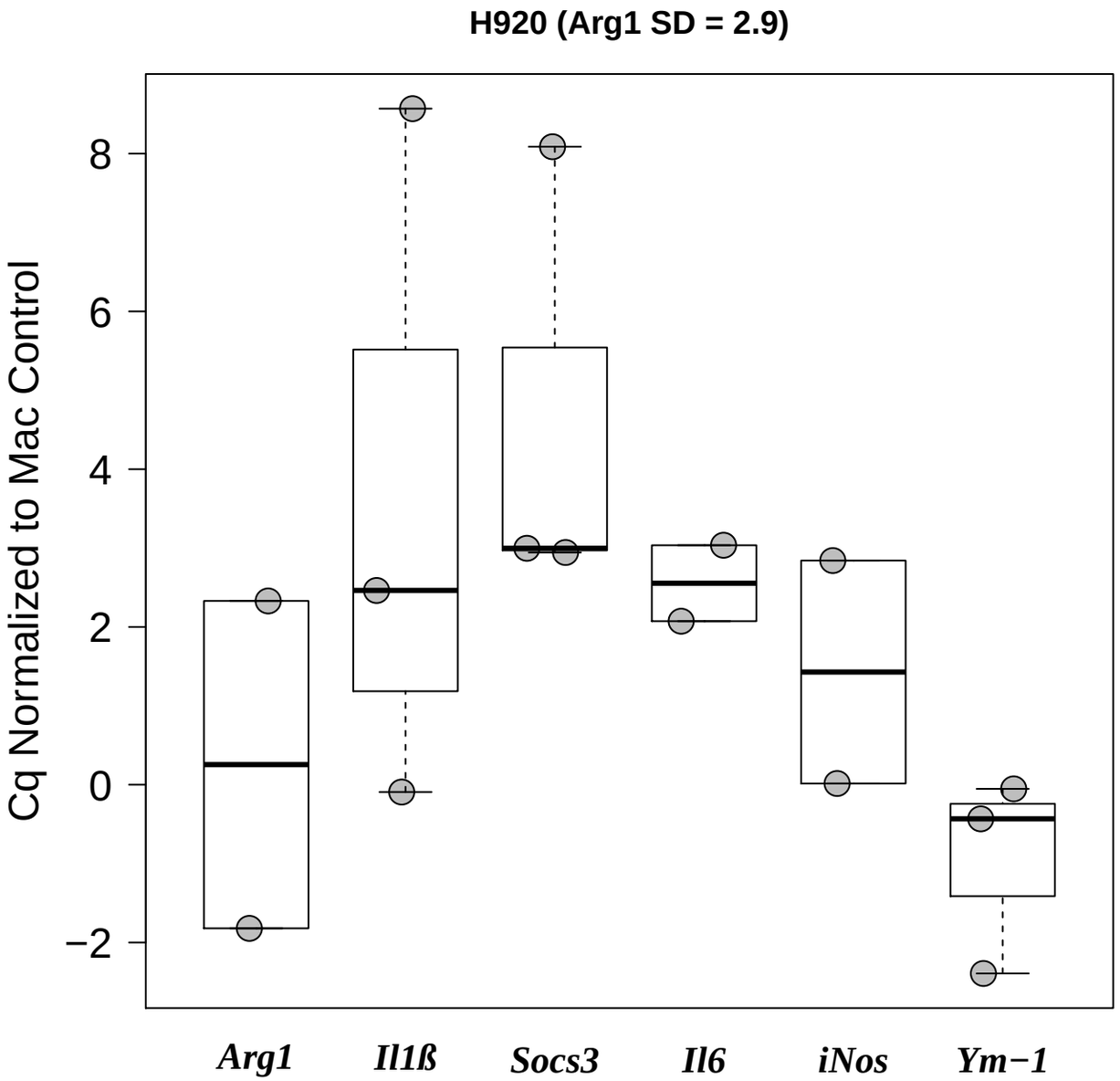

H647 (Arg1 SD = 1.8)
Cq Normalized to Mac Control
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

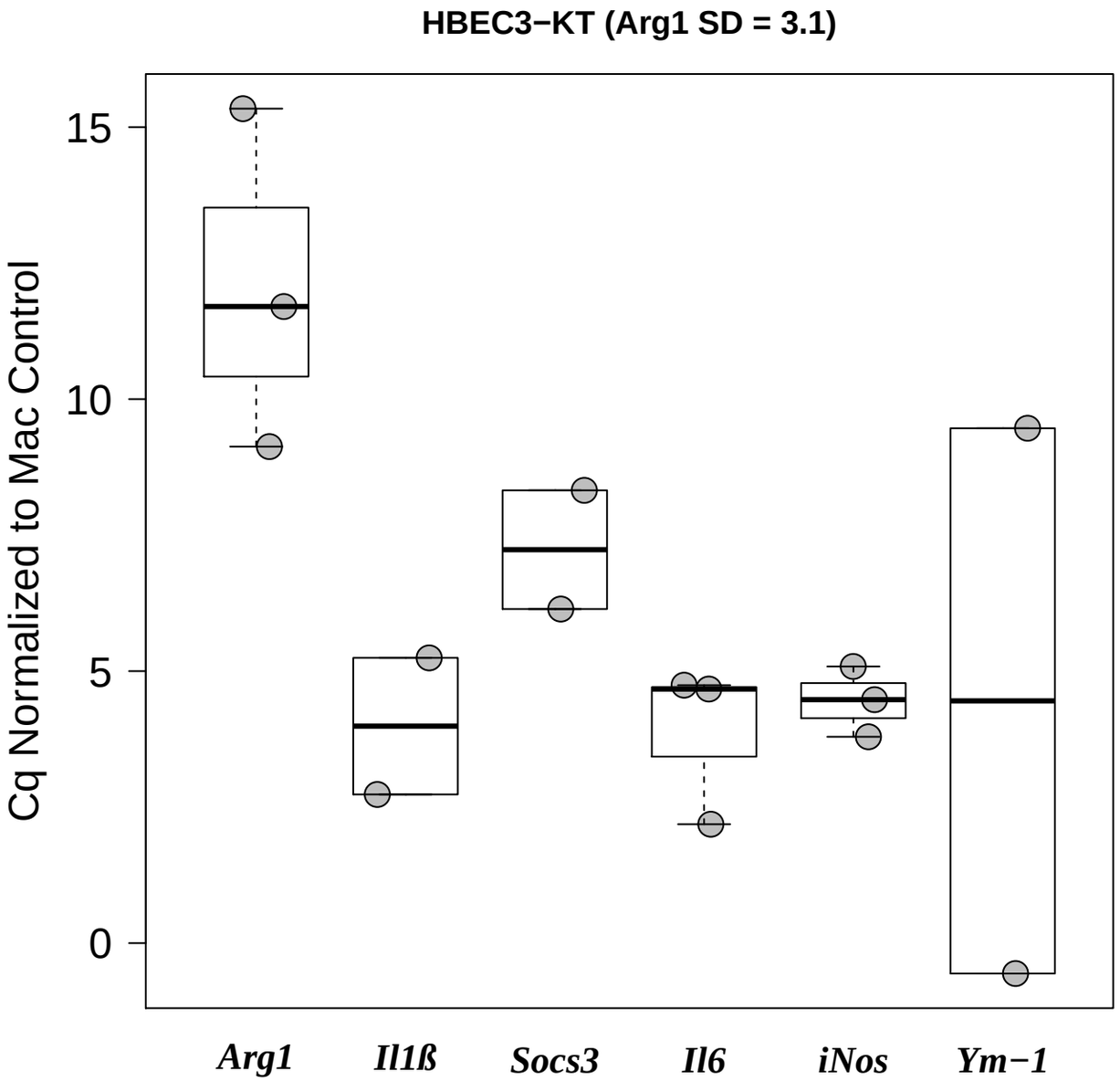

H650 (Arg1 SD = 2.5)
Cq Normalized to Mac Control
15
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

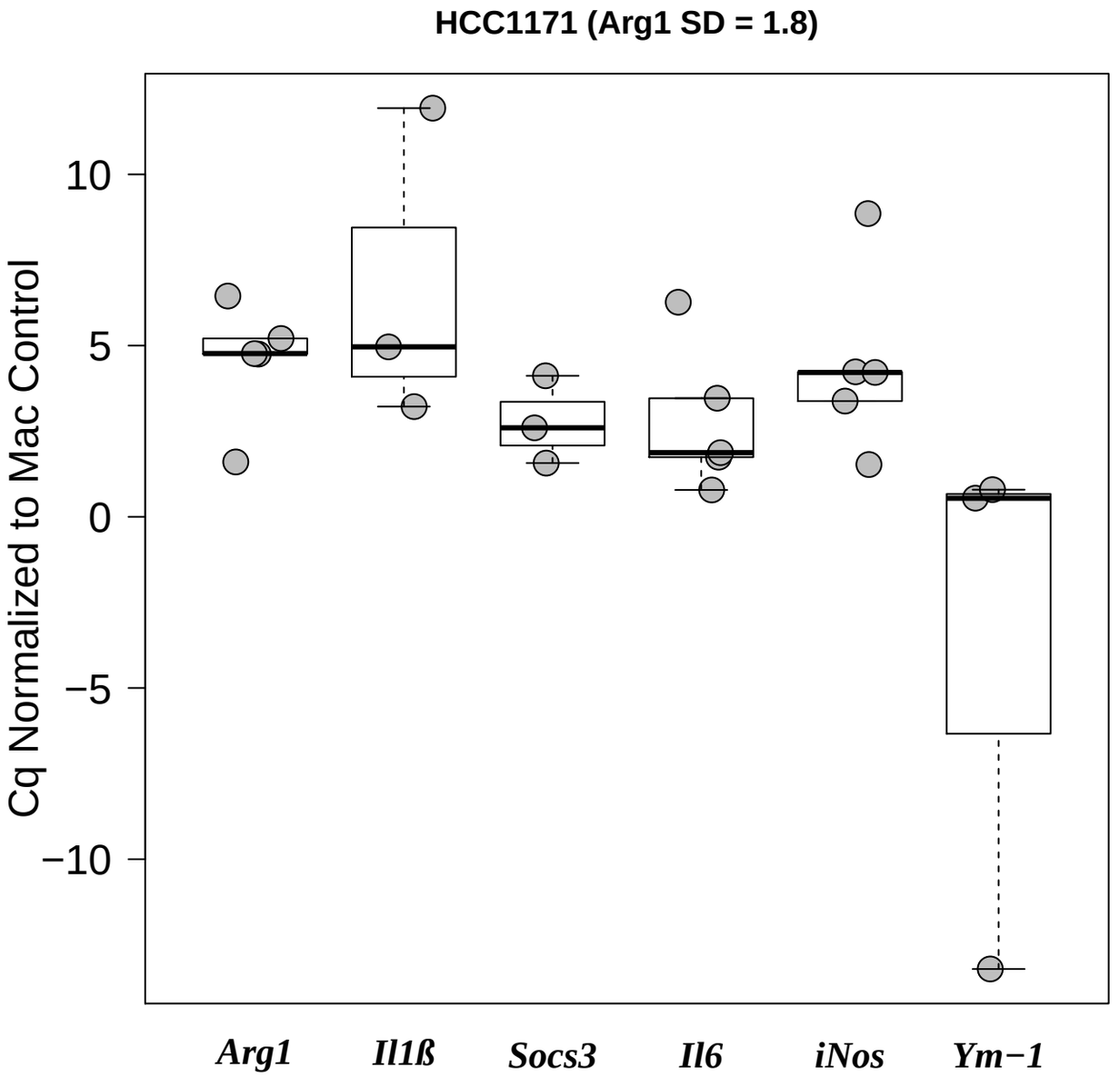

H661 (Arg1 SD = 3.9)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

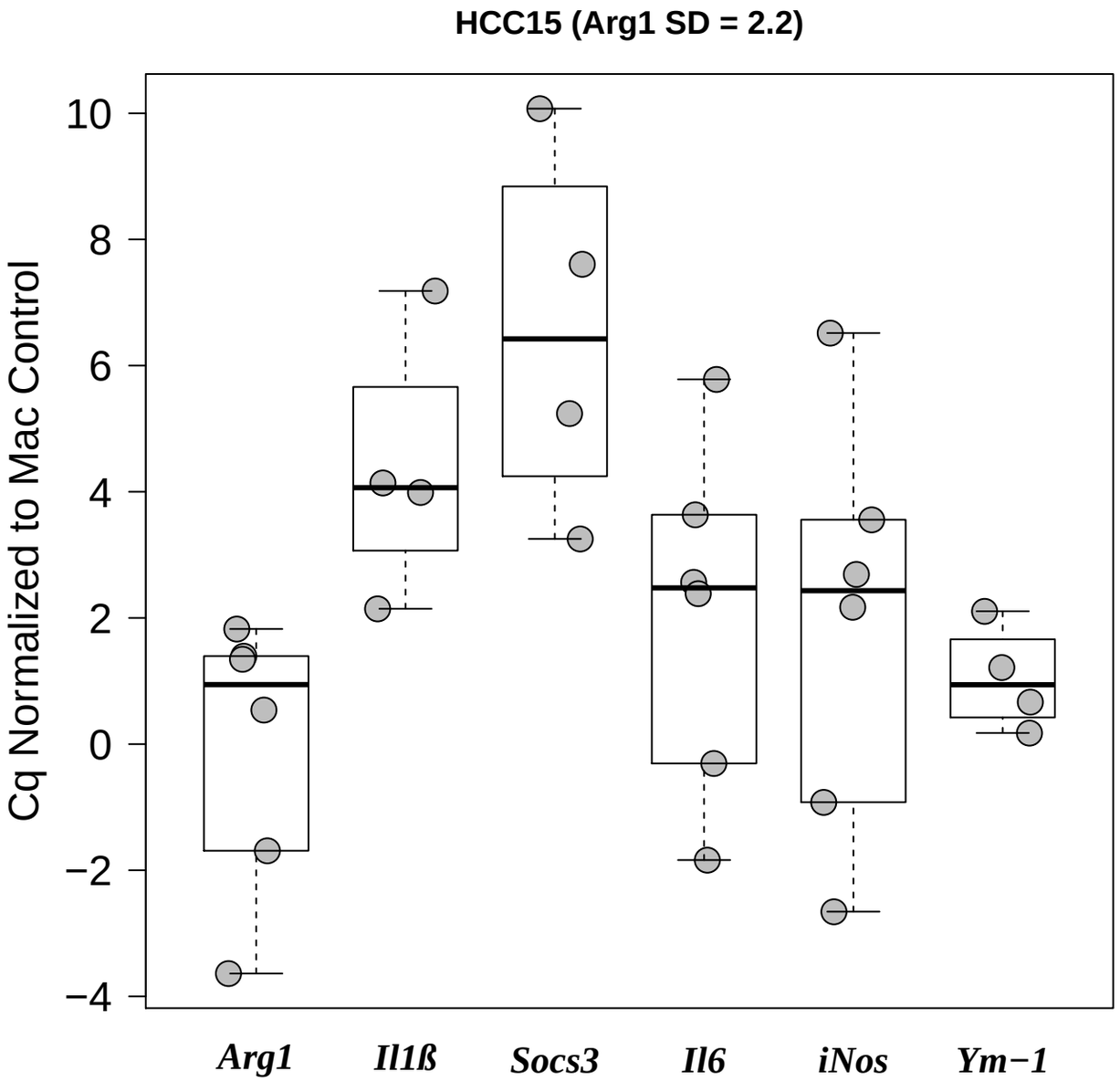

H820 (Arg1 SD = 2)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

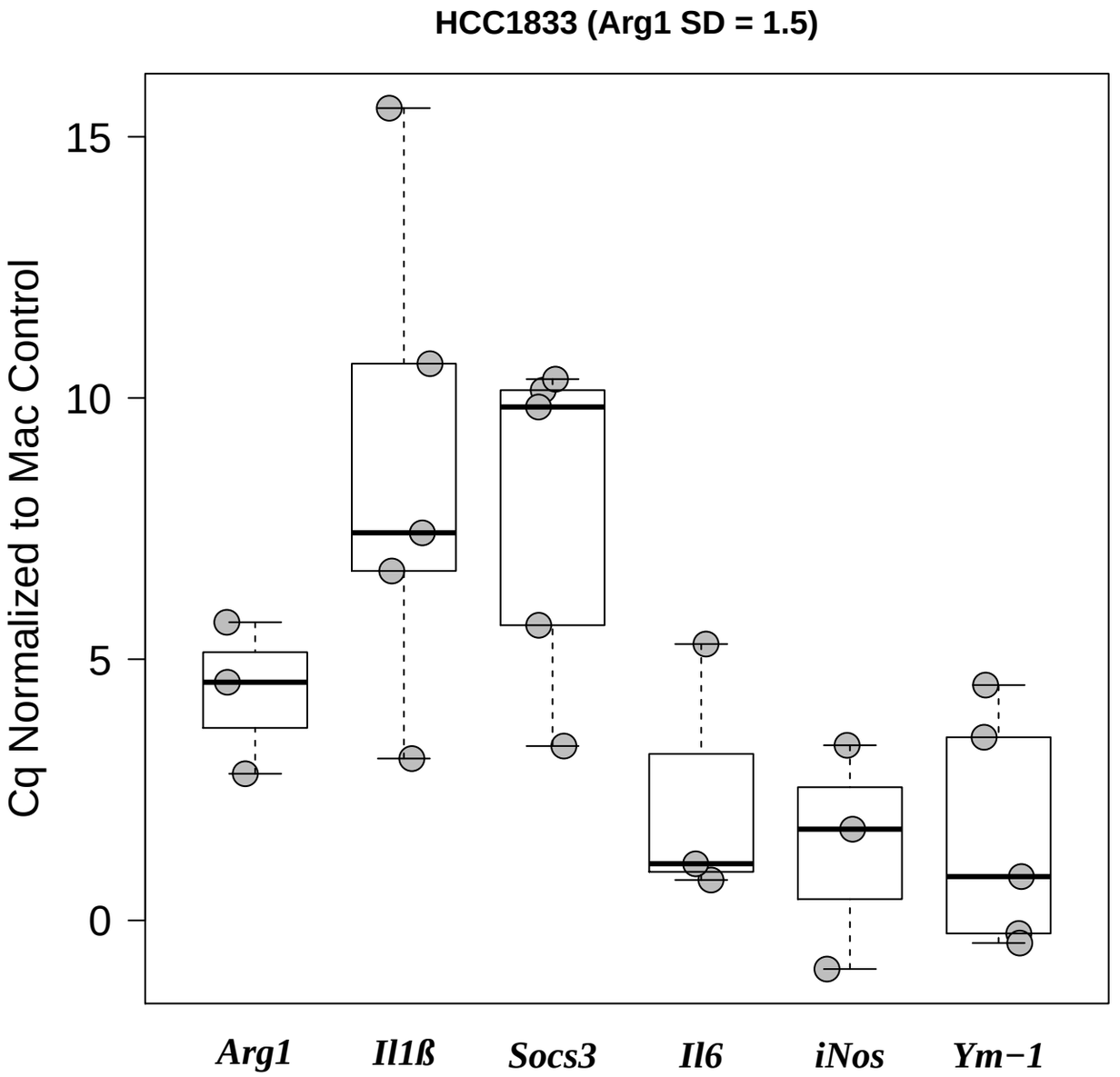

H838 (Arg1 SD = 2.6)
Cq Normalized to Mac Control
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

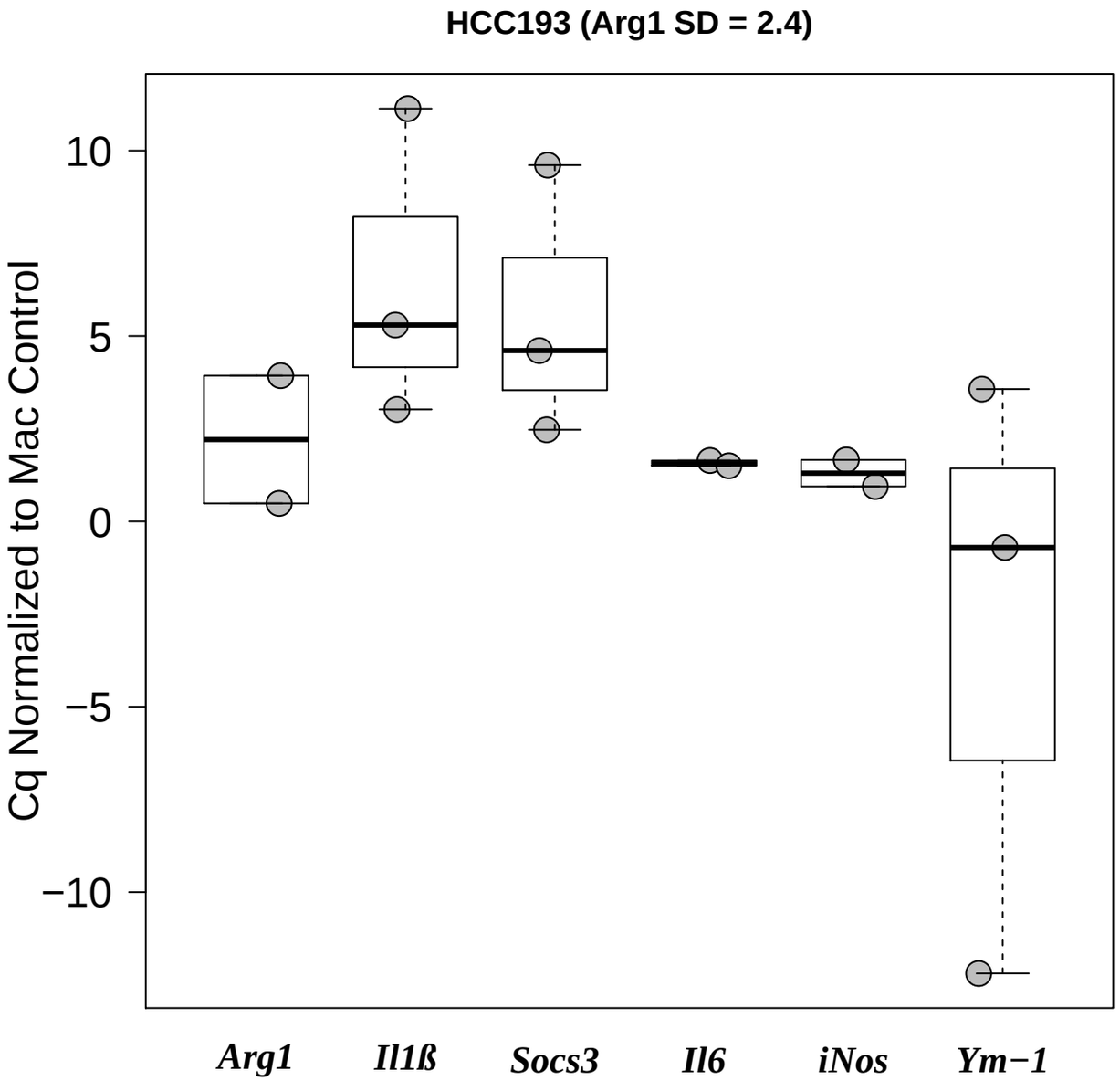

H920 (Arg1 SD = 2.9)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

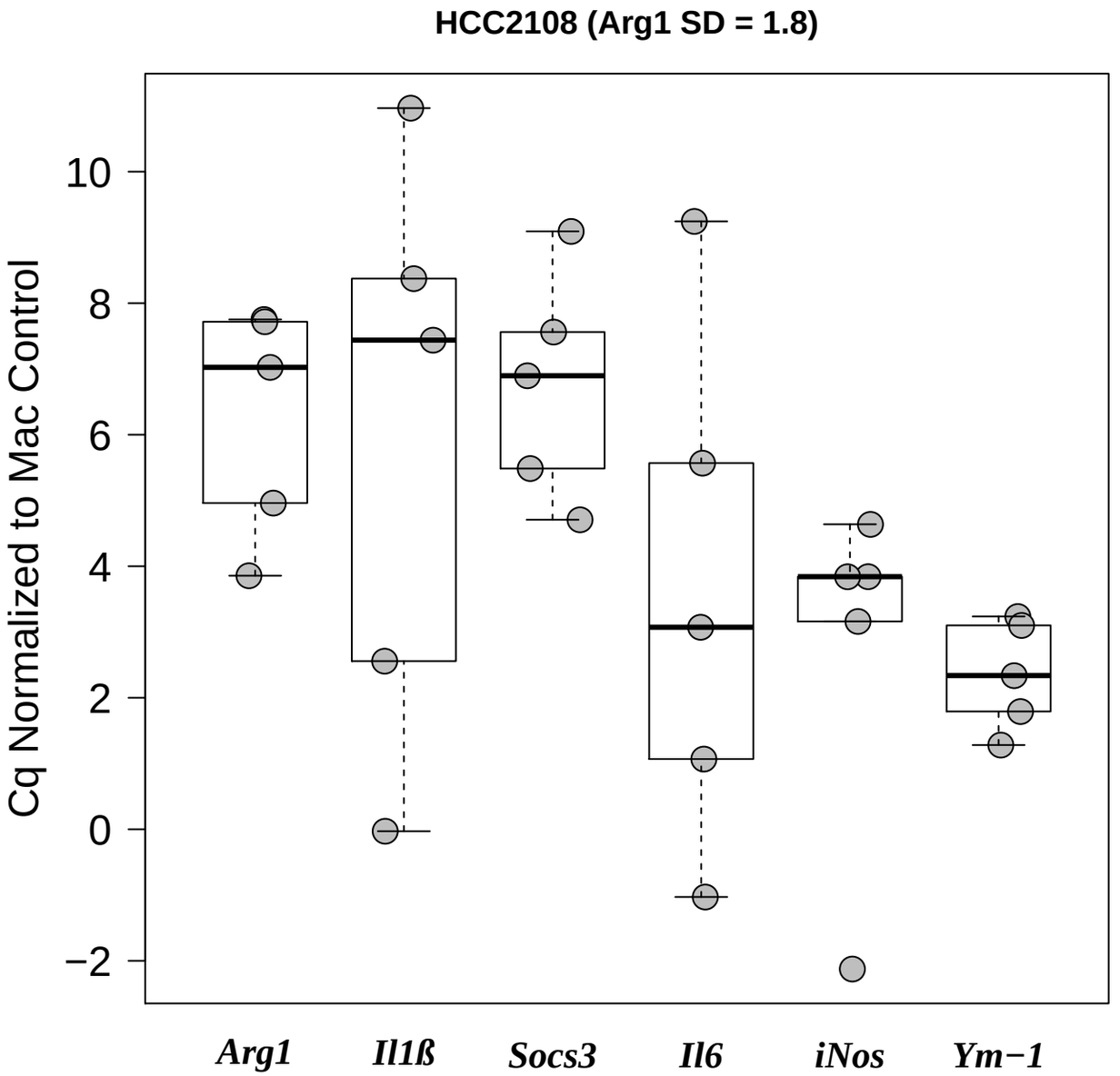

HBEC3−KT (Arg1 SD = 3.1)
Cq Normalized to Mac Control
15
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

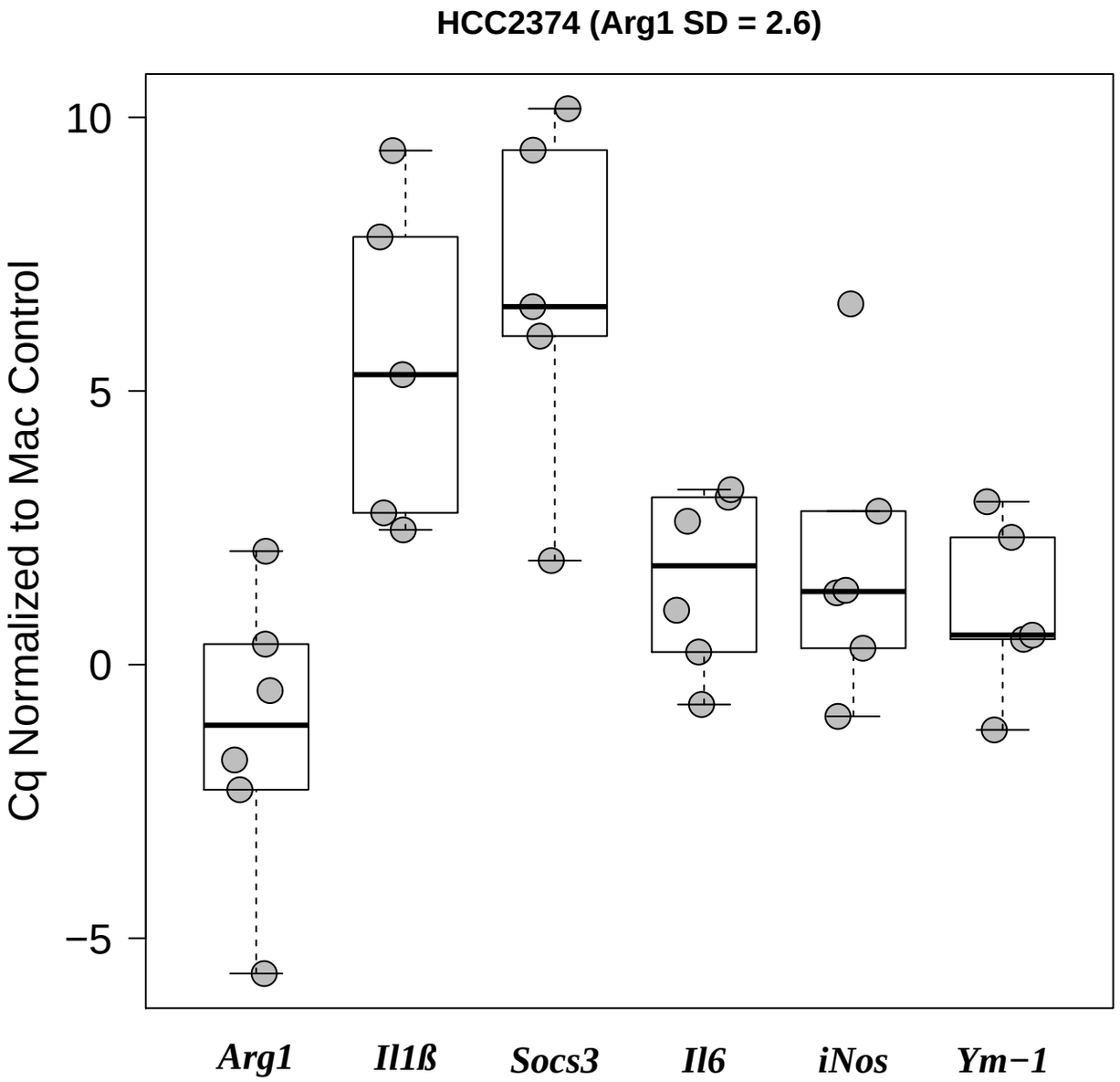

HCC1171 (Arg1 SD = 1.8)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

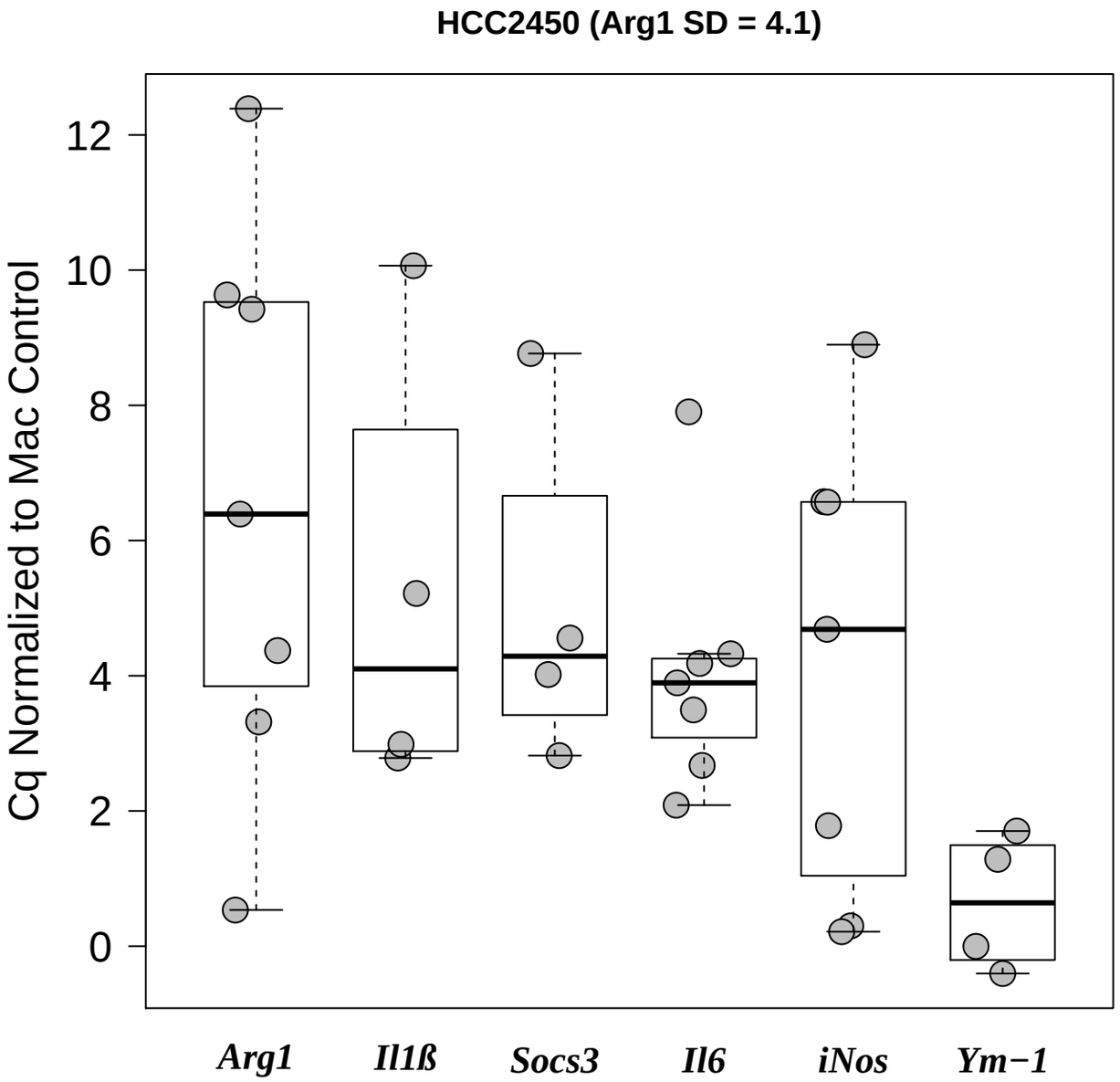

HCC15 (Arg1 SD = 2.2)
Cq Normalized to Mac Control
10
8
6
4
2
0
−2
−4
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

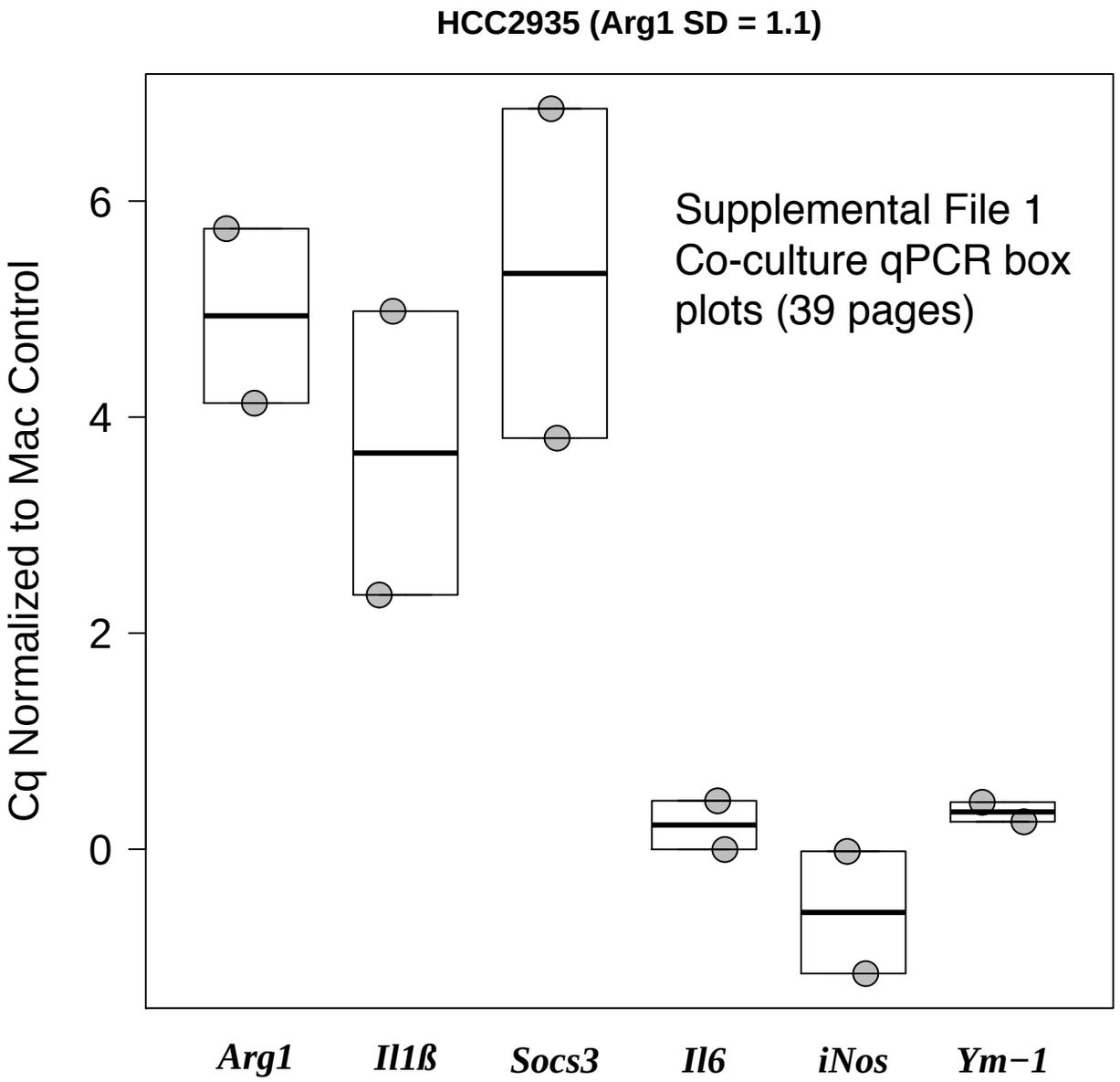

HCC1833 (Arg1 SD = 1.5)
Cq Normalized to Mac Control
15
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

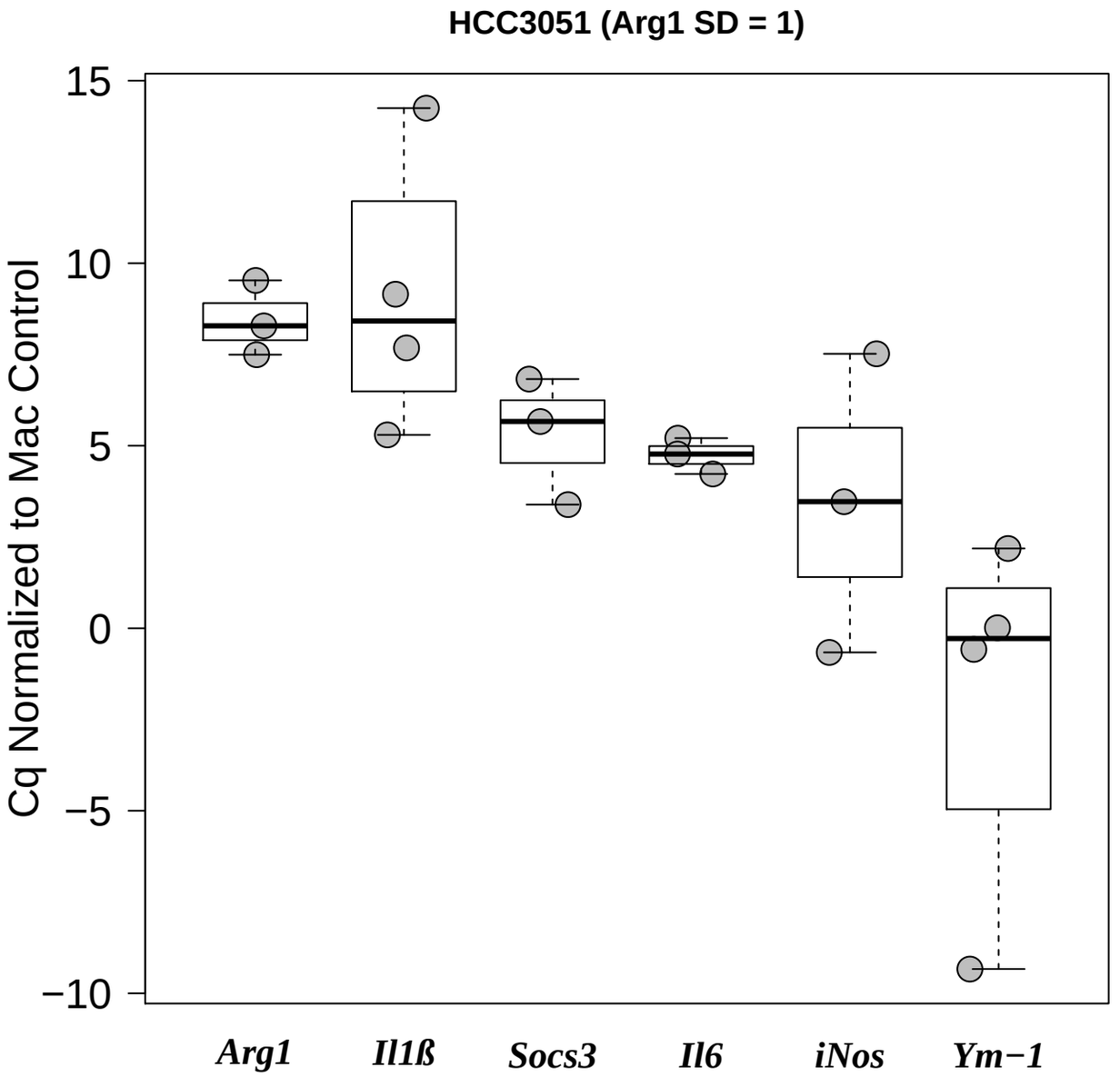

HCC193 (Arg1 SD = 2.4)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

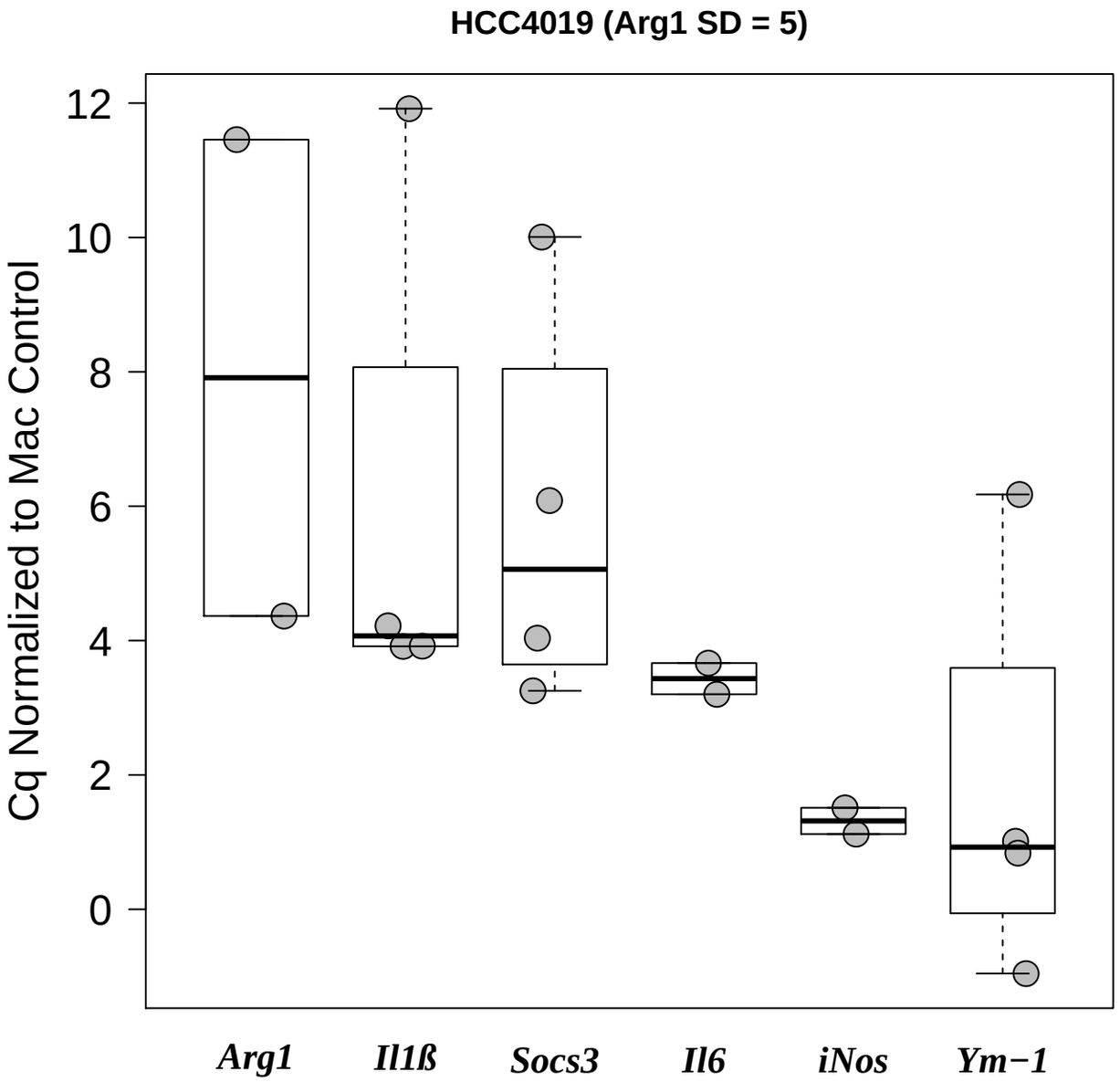

HCC2108 (Arg1 SD = 1.8)
Cq Normalized to Mac Control
10
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

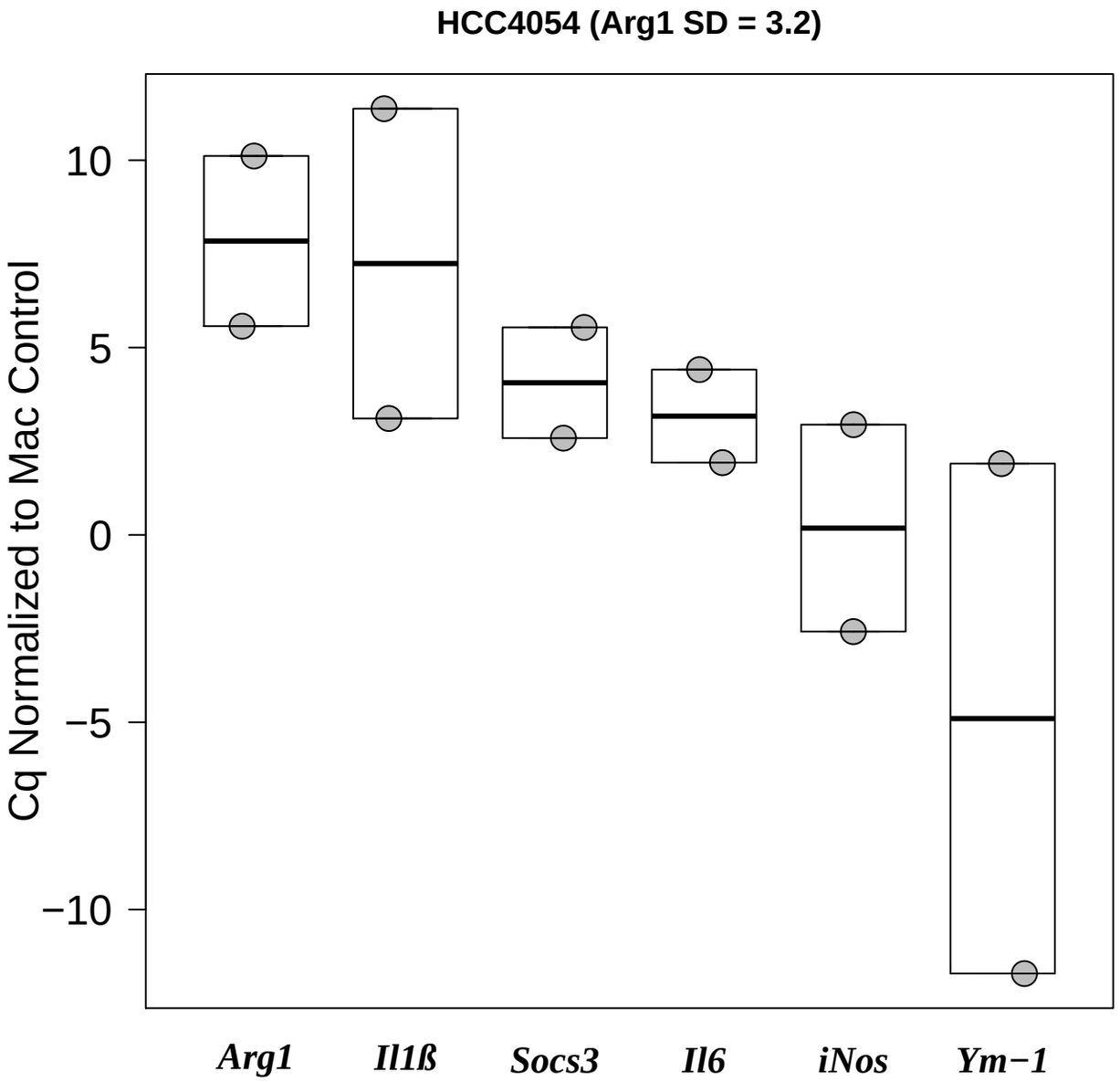

HCC2374 (Arg1 SD = 2.6)
Cq Normalized to Mac Control
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

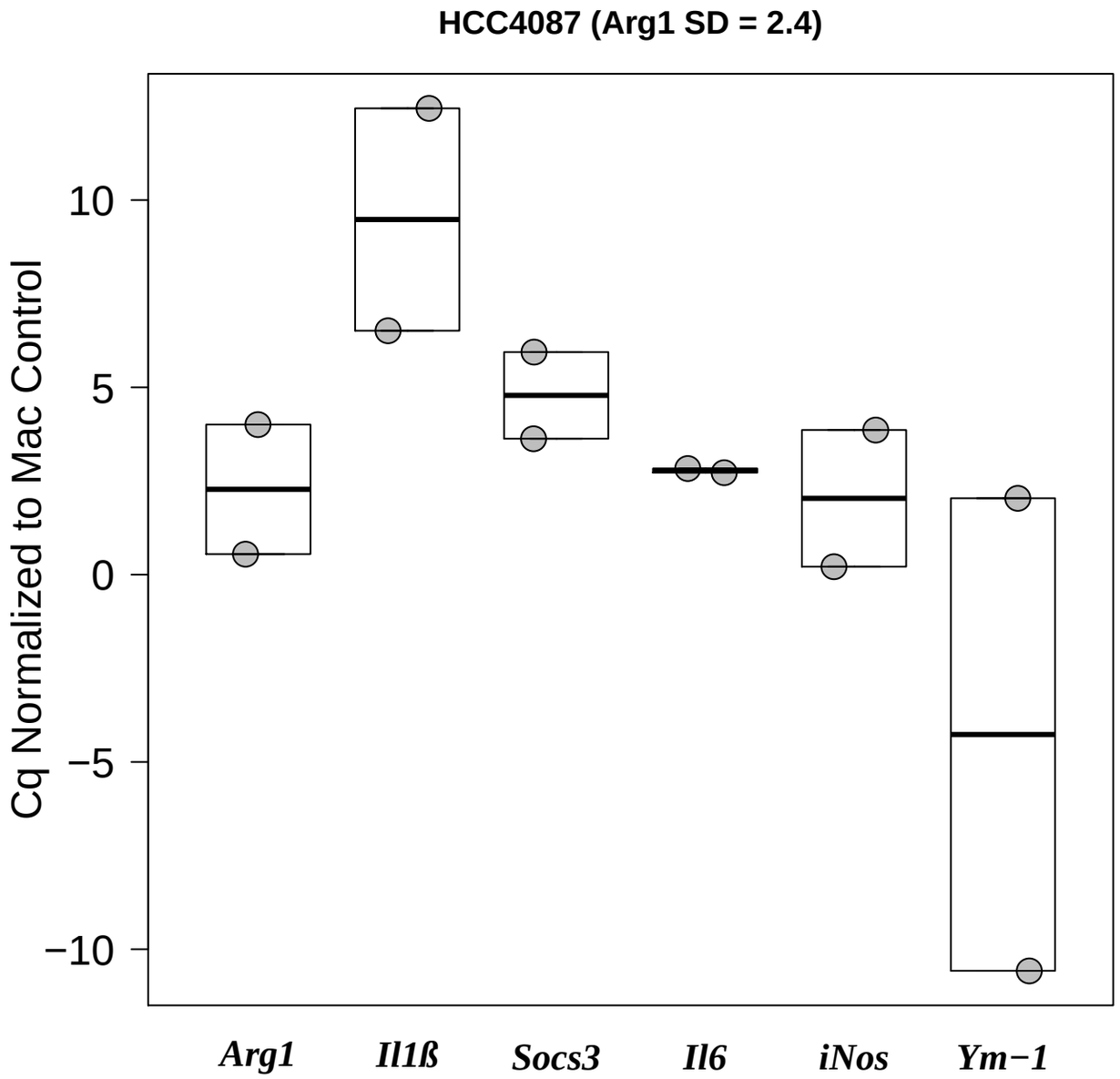

HCC2450 (Arg1 SD = 4.1)
Cq Normalized to Mac Control
12
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

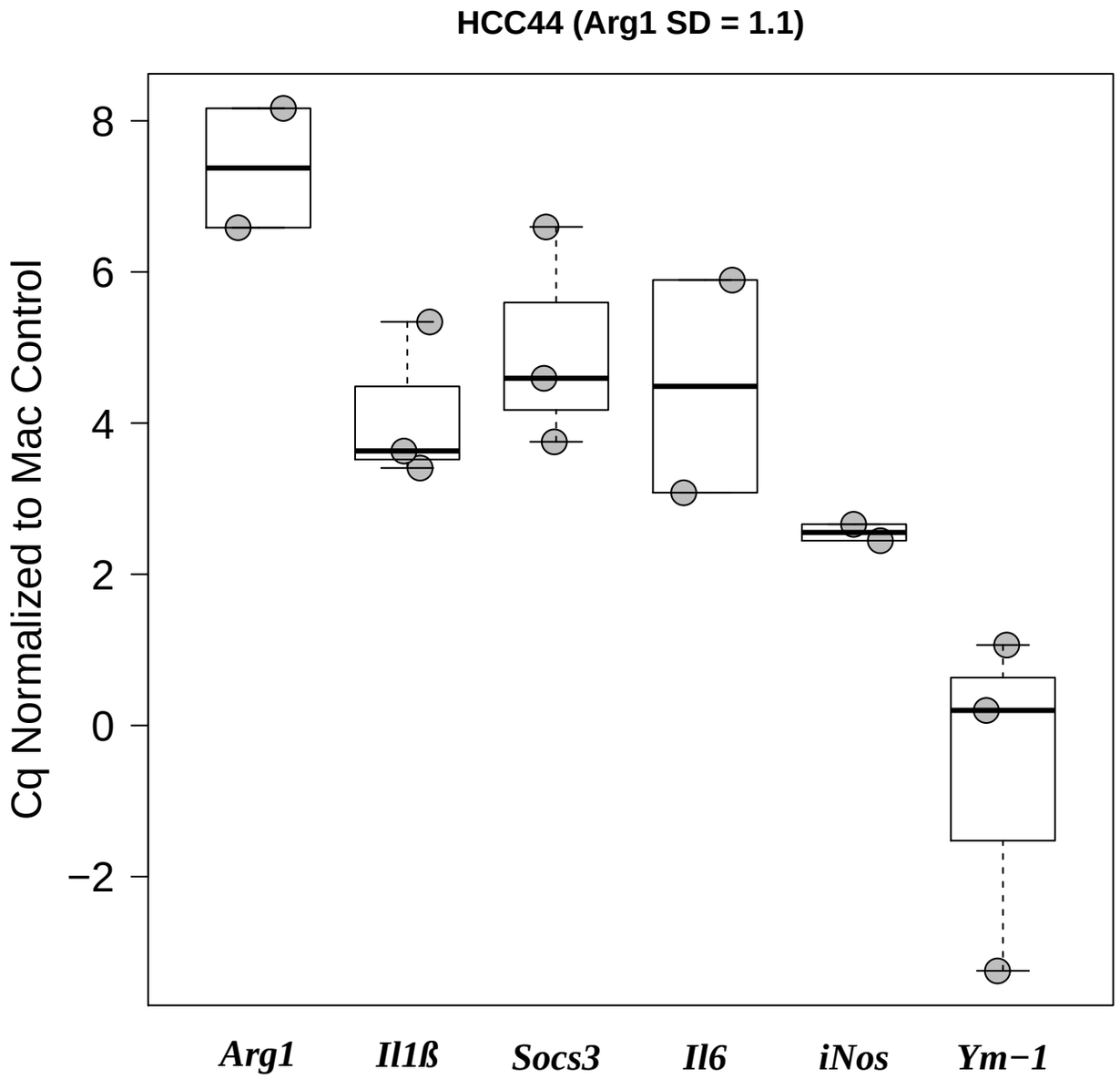

HCC2935 (Arg1 SD = 1.1)
Cq Normalized to Mac Control
6
4
2
0
Supplemental File 1
Co-culture qPCR box
plots (39 pages)
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

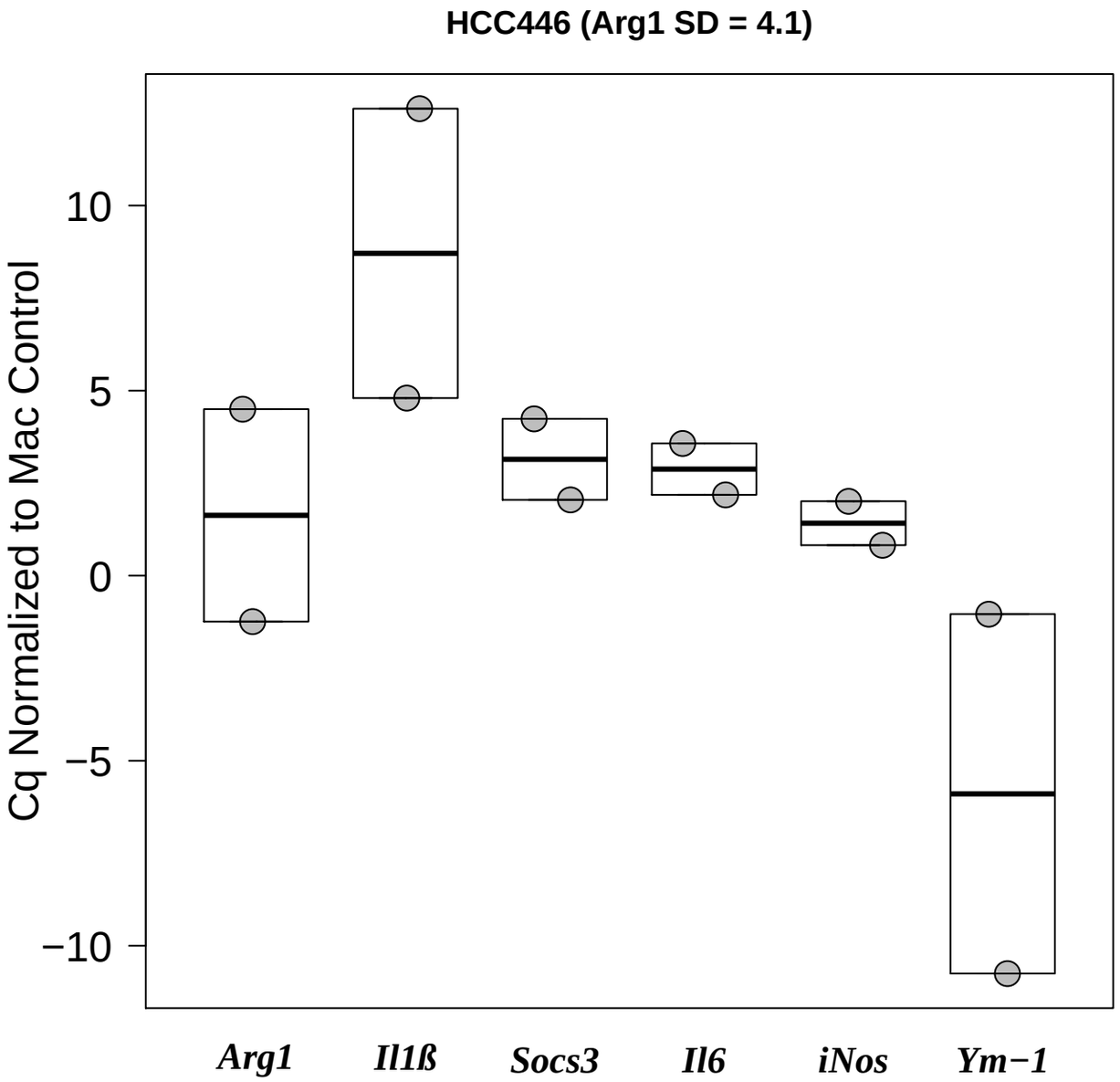

HCC3051 (Arg1 SD = 1)
Cq Normalized to Mac Control
15
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

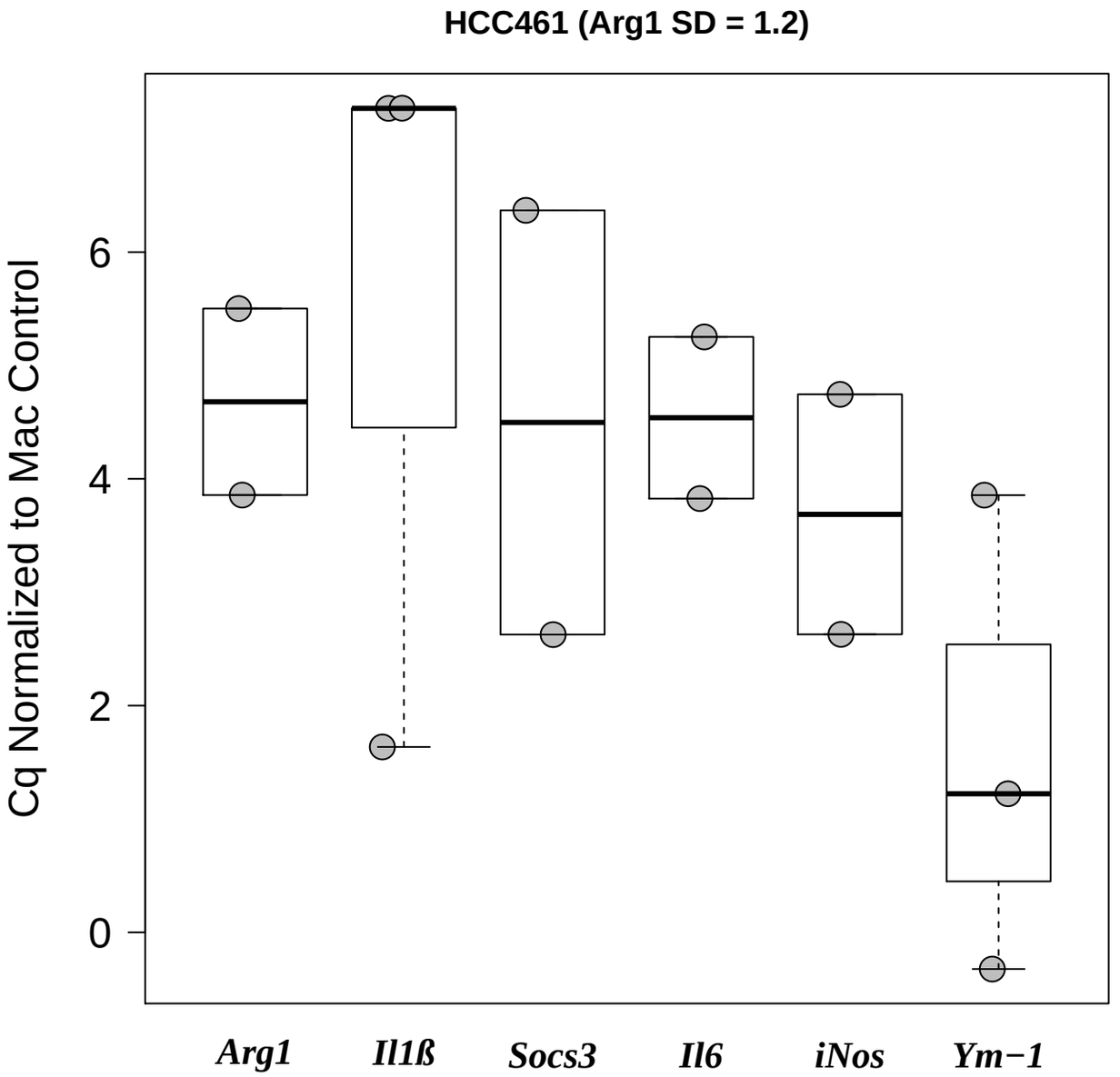

HCC4019 (Arg1 SD = 5)
Cq Normalized to Mac Control
12
10
8
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

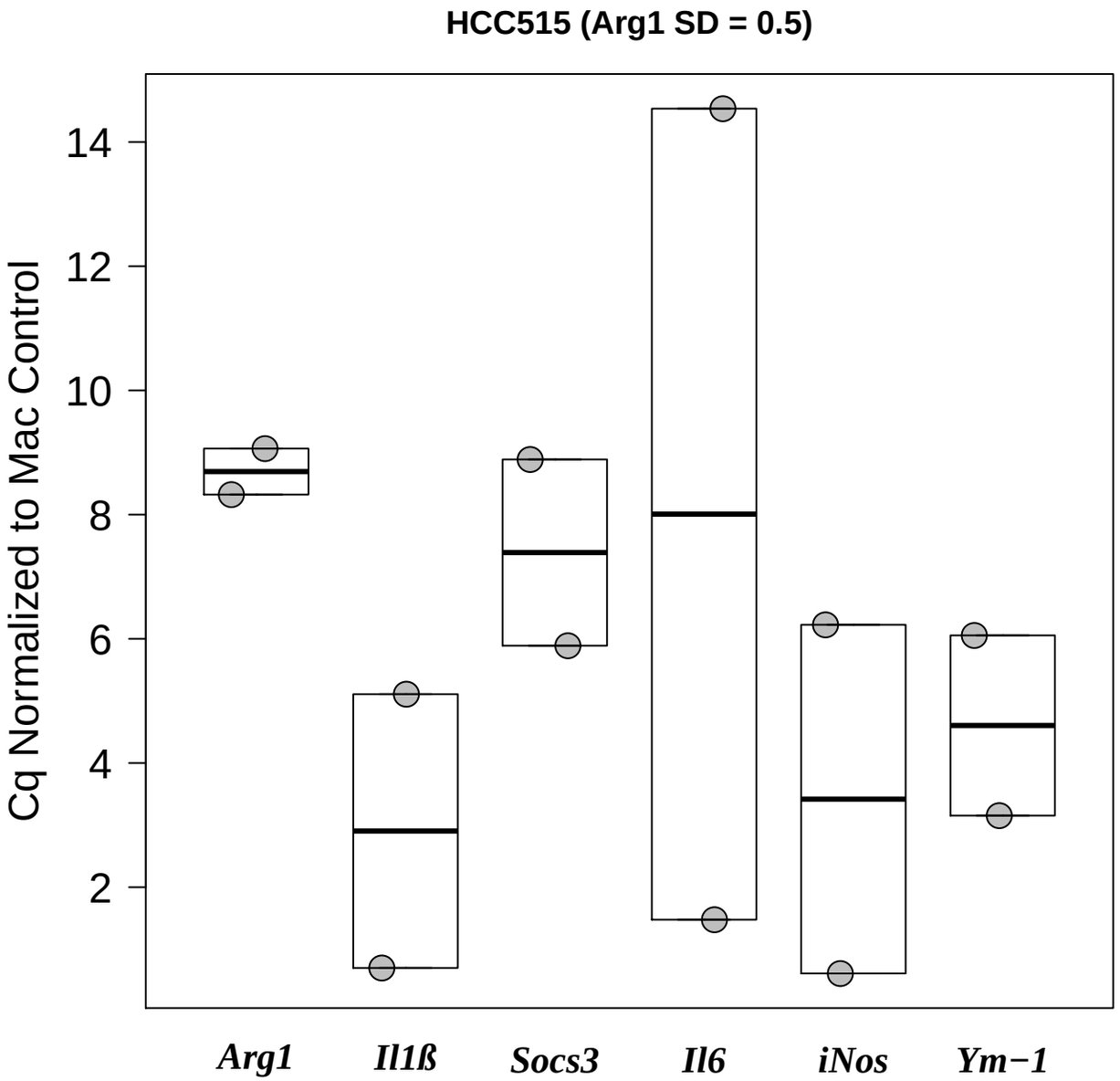

HCC4054 (Arg1 SD = 3.2)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

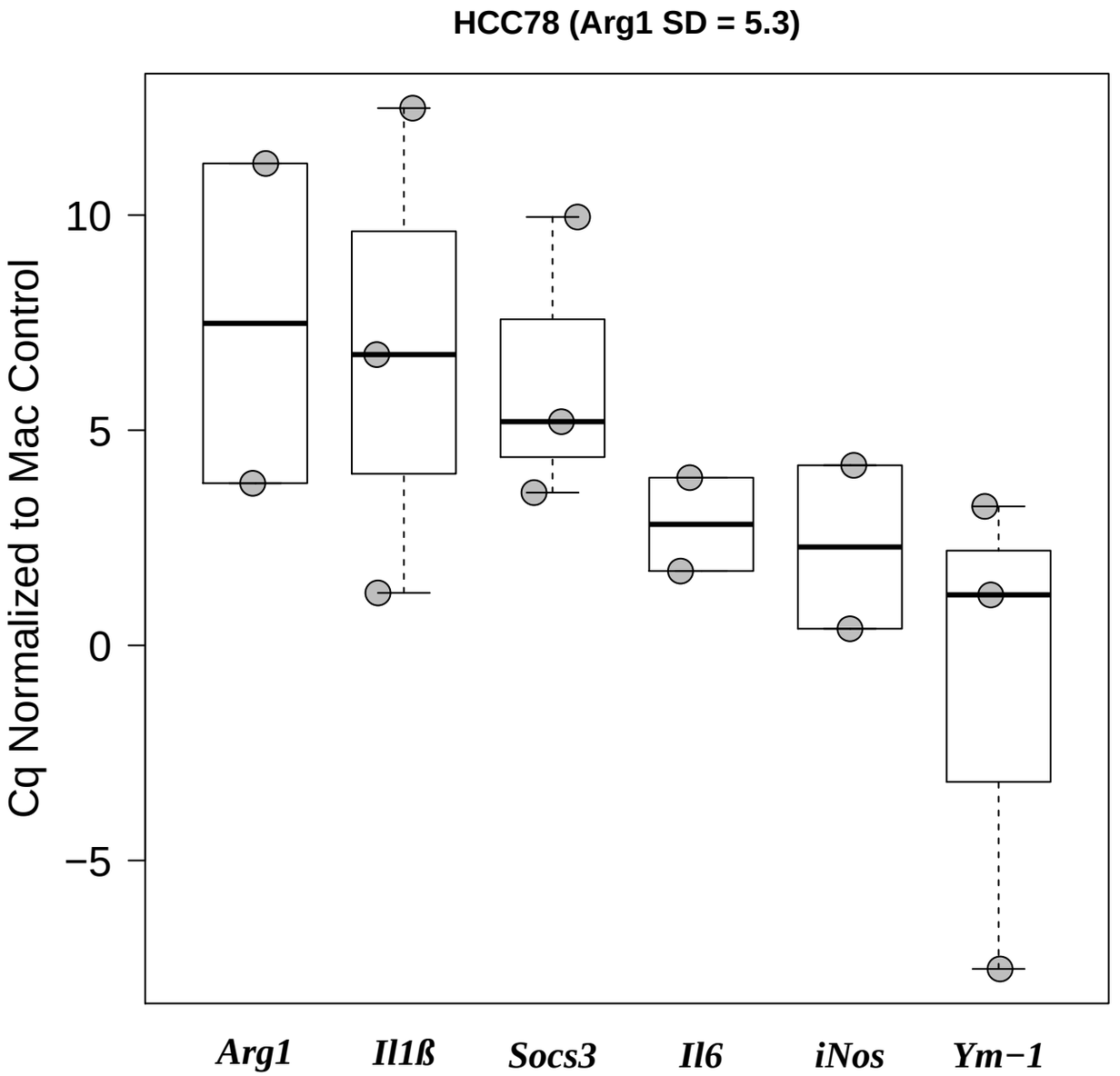

HCC4087 (Arg1 SD = 2.4)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

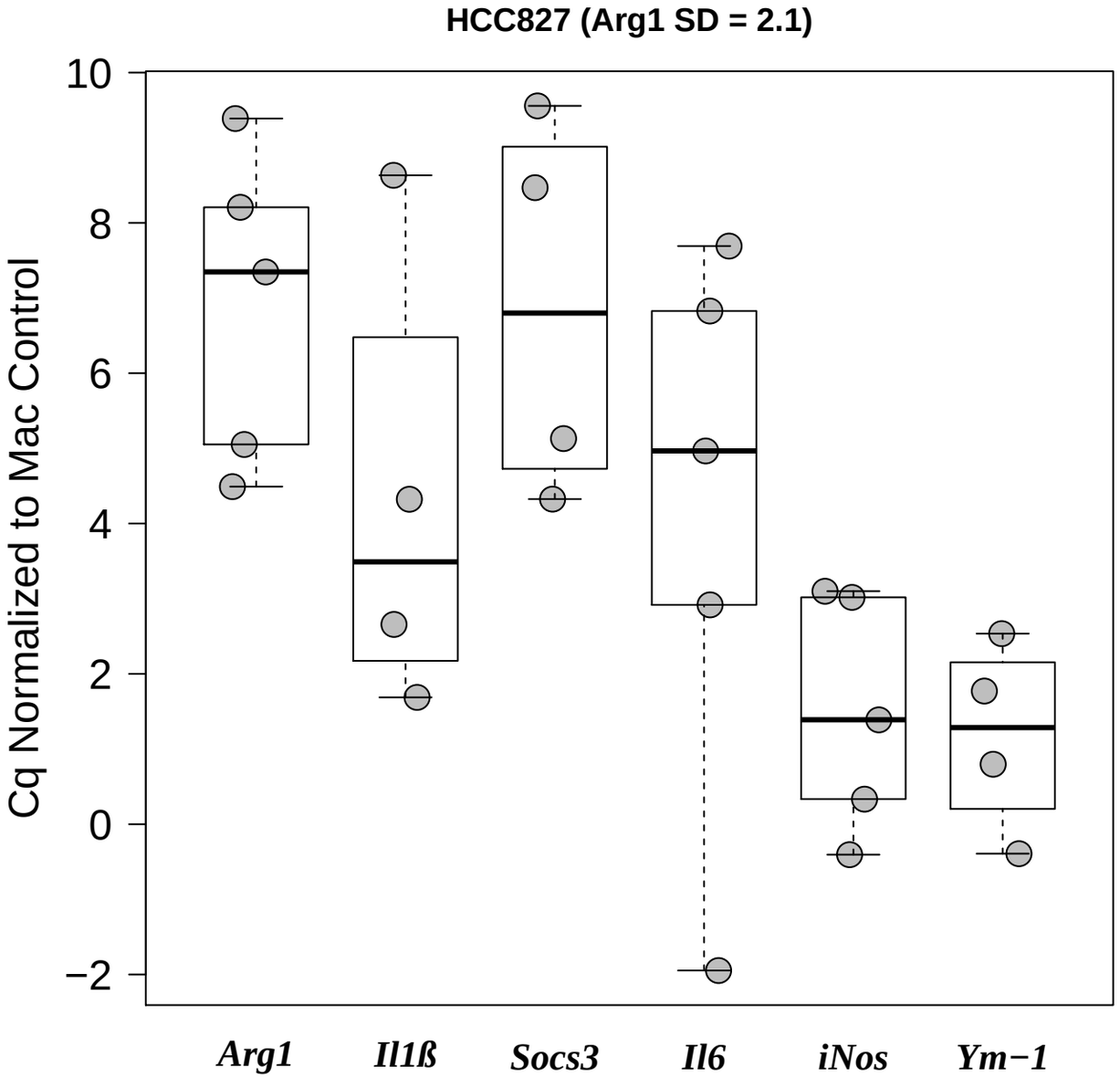

HCC44 (Arg1 SD = 1.1)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

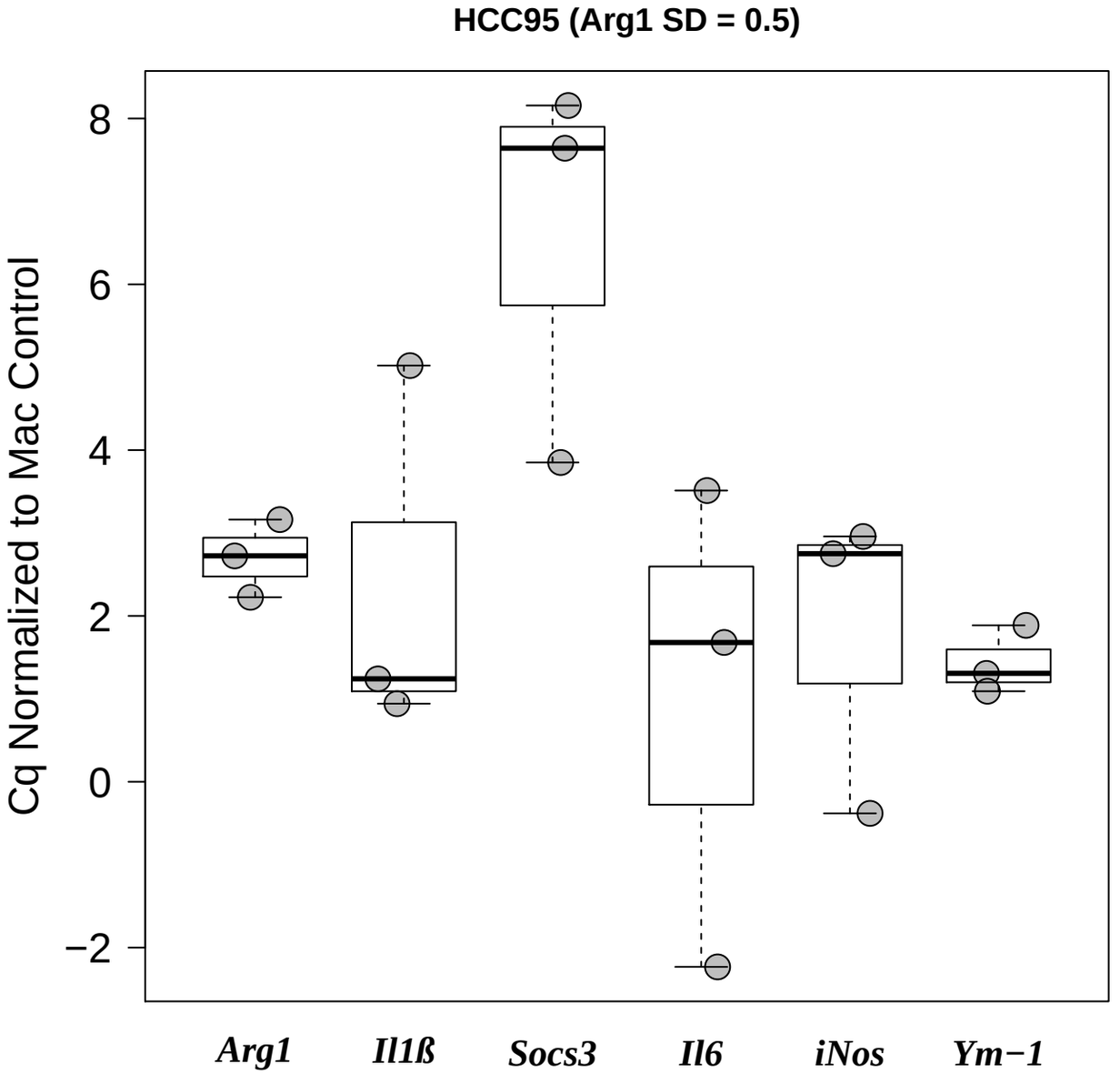

HCC446 (Arg1 SD = 4.1)
Cq Normalized to Mac Control
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

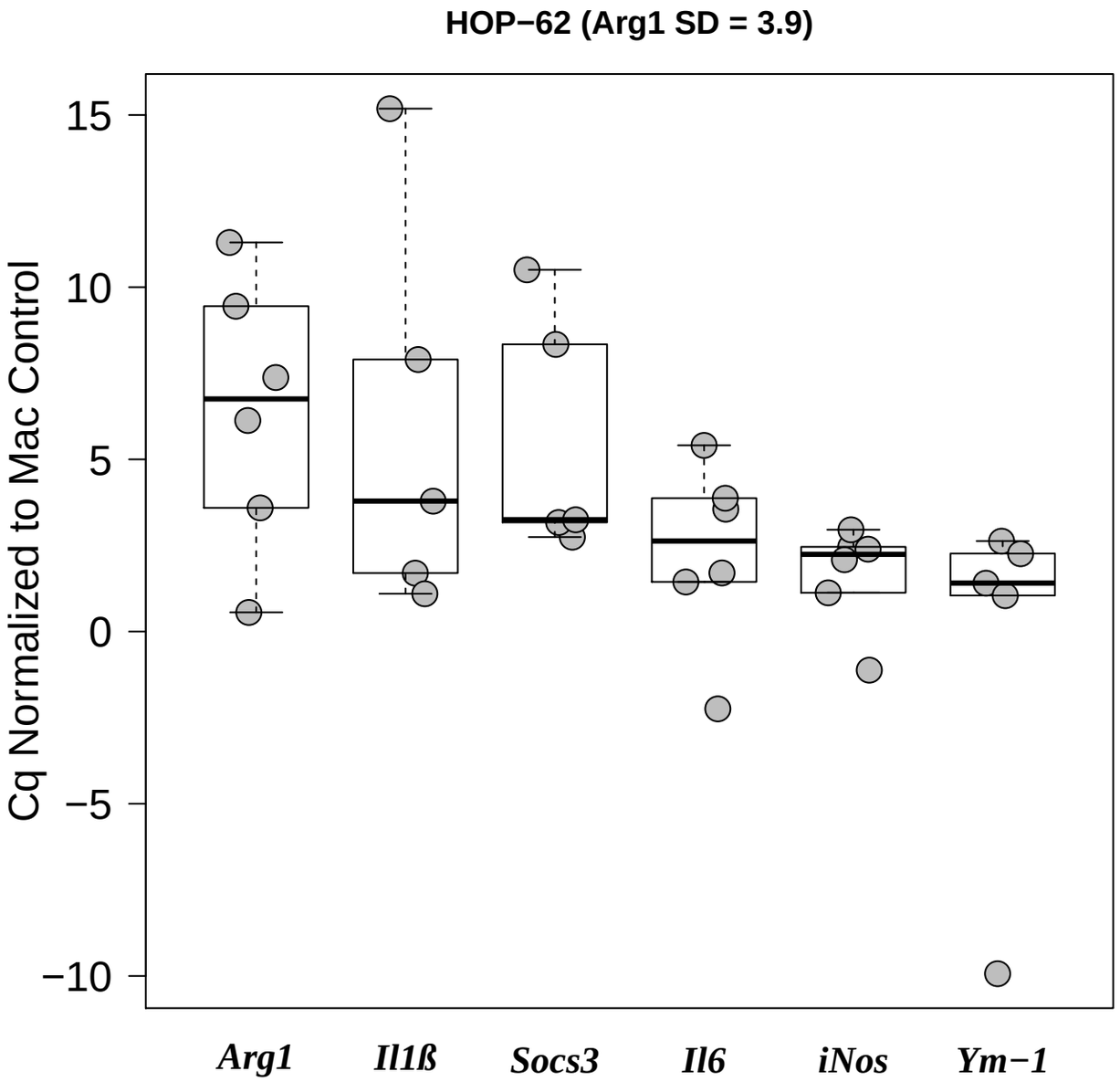

HCC461 (Arg1 SD = 1.2)
Cq Normalized to Mac Control
6
4
2
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

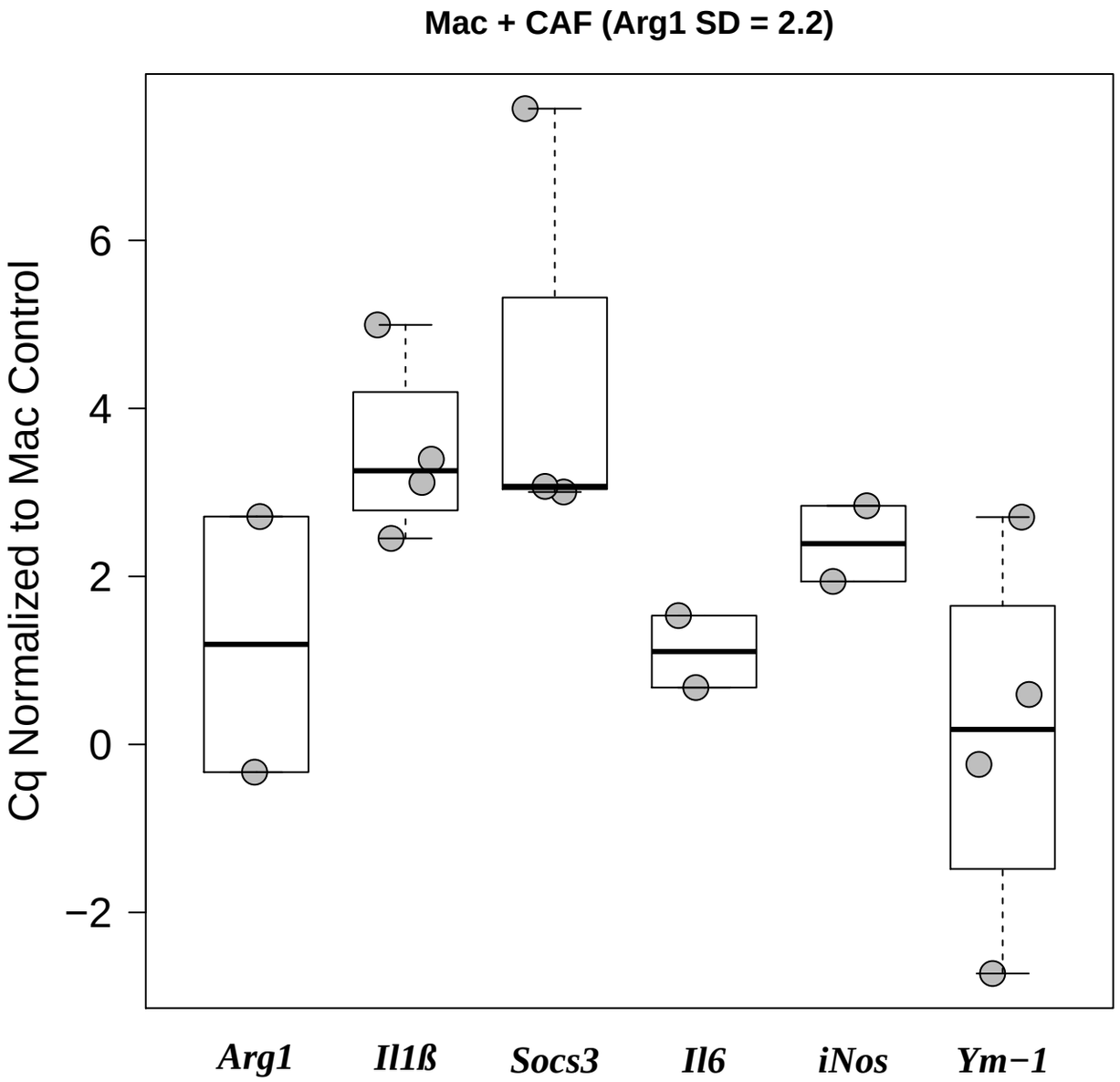

HCC515 (Arg1 SD = 0.5)
Cq Normalized to Mac Control
14
12
10
8
6
4
2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

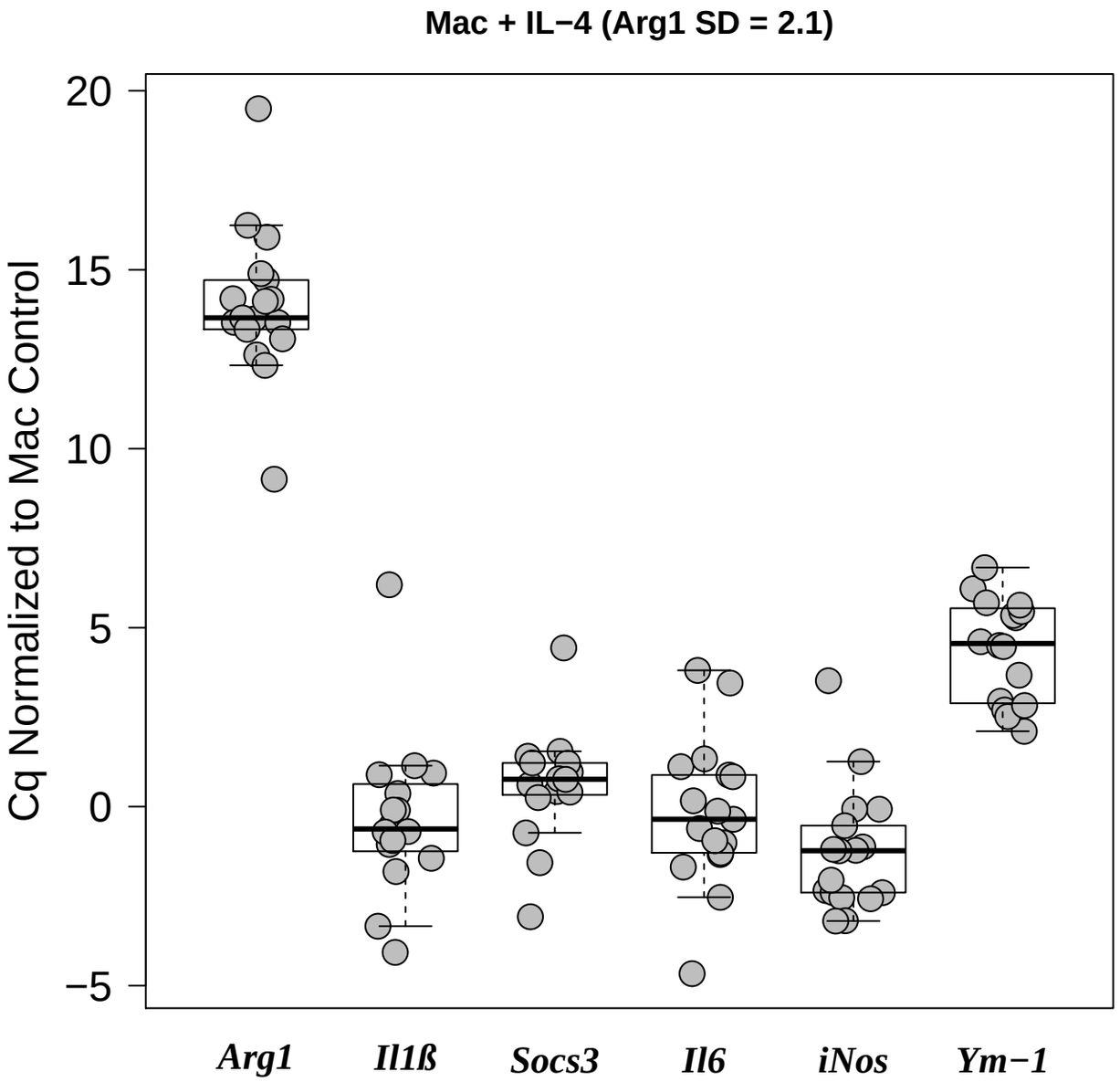

HCC78 (Arg1 SD = 5.3)
Cq Normalized to Mac Control
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

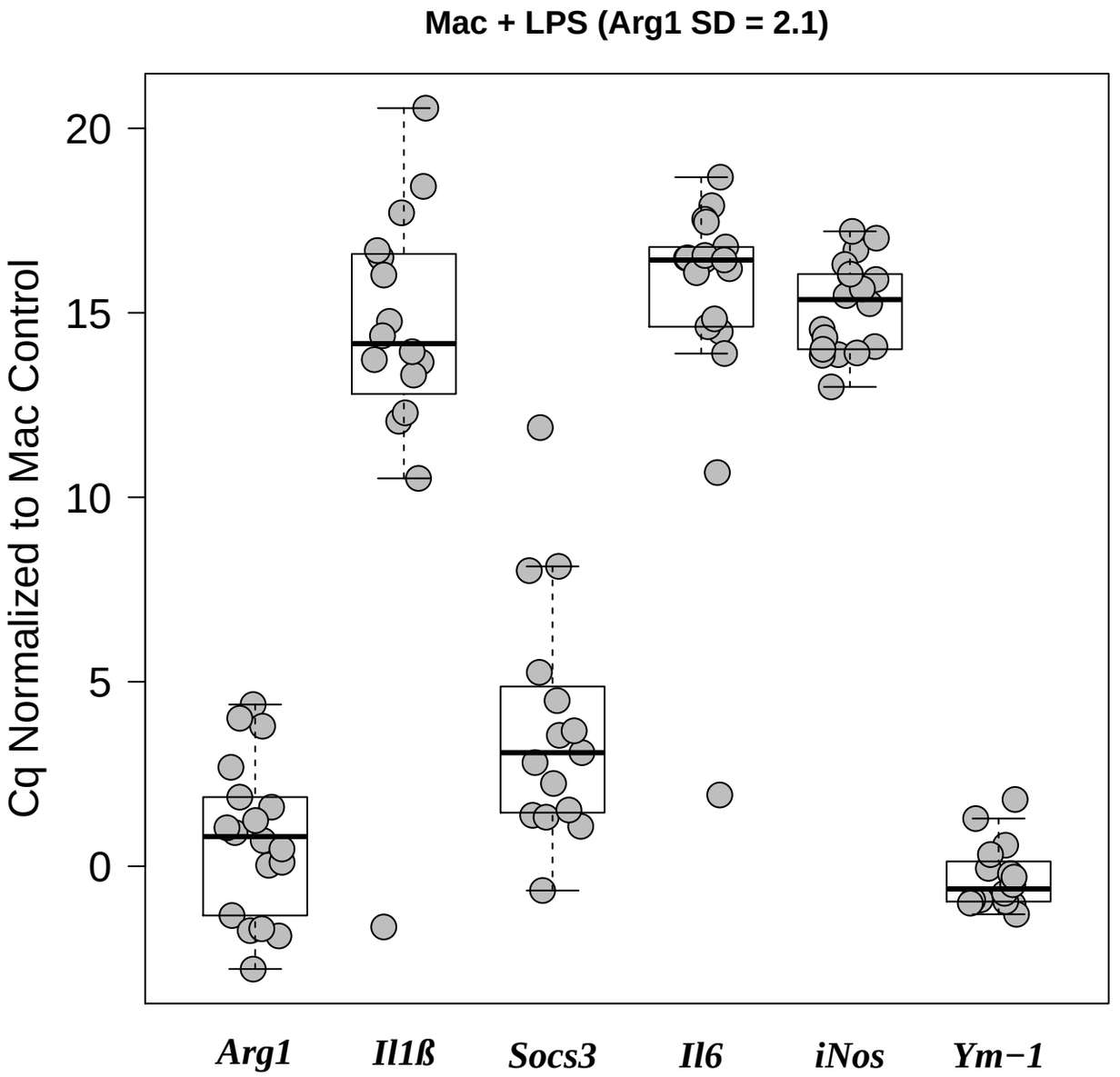

HCC827 (Arg1 SD = 2.1)
Cq Normalized to Mac Control
10
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1


HCC95 (Arg1 SD = 0.5)
Cq Normalized to Mac Control
8
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1


HOP−62 (Arg1 SD = 3.9)
Cq Normalized to Mac Control
15
10
5
0
−5
−10
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1


Mac + CAF (Arg1 SD = 2.2)
Cq Normalized to Mac Control
6
4
2
0
−2
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1


Mac + IL−4 (Arg1 SD = 2.1)
Cq Normalized to Mac Control
20
15
10
5
0
−5
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1


Mac + LPS (Arg1 SD = 2.1)
Cq Normalized to Mac Control
20
15
10
5
0
Arg1
Il1ß
Socs3
Il6
iNos
Ym−1

```
options(stringsAsFactors=F)
setwd("./Data")

dat <- read.delim("2- Co-culture qPCR raw data.txt", check.names=F)
platesort <- unique(dat[, c("Plate", "Plate_Sort")])
platesort <- platesort[order(platesort[, 2]), ]
unique(dat$Target)
sort(unique(dat$Sample))

#Exclusions
dat <- dat[!dat$Group %in% c(22,26,28,29), ]

#calculate mean and sd of technical replicates (each plate separately)
#exclude Cq values = 40 when other values are present in the mean calculation
dat.avg <- aggregate(dat$Cq, dat[c("Group", "Plate", "Target", "Sample")],
  function(d) {
    m <- mean(d[d != 40]); u <- sd(d[d != 40]); n <- length(d[d != 40])
    if (all(d == 40)) {m <- mean(d); u <- sd(d); n <- length(d)}
    cv <- (u * 100)/m
    c(m, u ,n, cv)
  }
)
n <- ncol(dat.avg)-1
dat.avg <- cbind(dat.avg[1:n], do.call(data.frame,dat.avg[n+1]))
dim(dat.avg)
colnames(dat.avg)[(n+1):(n+4)] <- c("Mean", "SD", "n", "CV")
dat.avg <- dat.avg[order(match(dat.avg$Plate, platesort[, 1]), dat.avg$Sample), ]

#Exclude data when actin Cq values are large
```

```
dat.avg.act <- dat.avg[dat.avg$Target == "Actin", ]
cut.dat.25 <- dat.avg.act[dat.avg.act$Mean >= 25, ]

#subtract Actin

dat.act <- dat.avg[dat.avg$Target == "Actin", 1:(n+1)]
dat.act2 <- merge(dat.avg[, 1:(n+1)], dat.act, by=c("Group", "Plate", "Sample"), all.x=T)
dat.act2 <- dat.act2[order(dat.act2$Group, match(dat.act2$Plate, platesort[, 1]),
  dat.act2$Sample, dat.act2$Target.x), ]
dat.act2$Mean.x <- dat.act2$Mean.x - dat.act2$Mean.y
dat.act2 <- dat.act2[dat.act2$Target.x != "Actin", 1:(n+1)]
colnames(dat.act2)[n:(n+1)] <- c("Target", "Mean")
dat.act2 <- dat.act2[!is.na(dat.act2$Mean), ]

#Remove Actin >=25
dat.act2.25 <- dat.act2[!paste(dat.act2$Group, dat.act2$Plate, dat.act2$Sample, sep="_")
  %in% paste(cut.dat.25$Group, cut.dat.25$Plate, cut.dat.25$Sample, sep="_"), ]
dat.act2 <- dat.act2.25

#take the median of duplicates within groups

dat.act3 <- aggregate(dat.act2$Mean, dat.act2[c("Group", "Target", "Sample")], median, na.rm=T)
colnames(dat.act3)[4] <- "Median"
dat.act3 <- dat.act3[order(dat.act3$Group, dat.act3$Sample, dat.act3$Target), ]

#subtract Mac control
dat.mac <- dat.act3[dat.act3$Sample == "Mac",]
dat.mac2 <- merge(dat.act3, dat.mac, by=c("Group", "Target"), all.x=T)
dat.mac2 <- dat.mac2[order(dat.mac2$Group, dat.mac2$Sample.x, dat.mac2$Target), ]
```

```
dat.mac2$Median.x <- dat.mac2$Median.x - dat.mac2$Median.y
dat.mac3 <- dat.mac2[dat.mac2$Sample.x != "Mac", 1:4]
colnames(dat.mac3)[3:4] <- c("Sample", "Median")
dat.mac3 <- dat.mac3[!is.na(dat.mac3$Median), ]
any(is.na(dat.mac3$Median))

##### Box plots

allsamples <- sort(unique(dat.mac3$Sample))
alltargets <- unique(dat.mac3$Target)[c(1,2,5,3,4,6)]
ngroup <- length(unique(dat.mac3$Group))
ngroup

#Keep only samples with at least 2 replicates in each of the 3 main markers (Arg1, Il1b, and Socs3)

Excludesamples <- function(thisdat) {
  allsamples <- sort(allsamples)
  countrep <- aggregate(thisdat$Target, thisdat[c("Target", "Sample")], length)
  colnames(countrep)[3] <- "count"

  attach(countrep)
    test1 <- Sample[Target %in% c("Arg1", "Il1b", "Socs3") & count >= 2]
  detach(countrep)
  test1b <- table(test1)

  keepsamples <<- rownames(test1b)[test1b == 3]
  allsamples <<- c(keepsamples, setdiff(allsamples, keepsamples)) #excluded samples will be at the end
}

Excludesamples(dat.mac3)
```

```
library(greekLetters)

boxplots <- function(thisdat, title) {
  pdf(file=paste("4- ", title, ".pdf", sep=""), width=14, height=7)
  par(mfrow=c(1,2), mar=c(4,5,3,1) + 0.1)
  set.seed(1234)
  res <- list()
  for (k in 1:length(keepsamples)) {
    x <- thisdat[thisdat$Sample == allsamples[k], ]
    y <- split(x, x$Target)
    y <- y[alltargets[!is.na(match(alltargets, names(y)))]]
    yval <- lapply(y, function(d) -d$Median[!is.na(d$Median)])
    ygroup <- lapply(y, function(d) d$Group[!is.na(d$Median)])
    yleg <- sort(unique(unlist(ygroup)))
    ylim <- c(min(sapply(yval, min)), max(sapply(yval, max)))
    ybase <- ylim[1] - 0.1*(ylim[2]-ylim[1])

    stripchart(yval[[1]], at=1, ylab="", main="", cex.axis=1.5,
      bg="gray", method="jitter", jitter=0.2, vertical=T,
      pch=21, cex=2, xlim=c(0.5, 6.5), ylim=ylim, las=1, cex.main=1.2, xaxt="n")
    for (j in 2:length(yval)) {
      stripchart(yval[[j]], at=j, ylab="", main="", cex.axis=1.5,
        bg="gray", method="jitter", jitter=0.2, vertical=T,
        pch=21, cex=2, xlim=c(0.5, 6.5), ylim=ylim, las=1, cex.main=1.2, xaxt="n", add=T)
    }
    boxplot(yval, axes=F, add=T, outline=F, boxwex=0.7)
    text(1:length(yval), ybase, sub("b", greek$beta, names(yval)),
      cex=1.3, xpd=NA, font=4, family="serif")
    mtext(side=2, paste("Cq Normalized to Mac Control"), line=3, cex=1.5)
```

```
    arg.median <- median(yval[[1]])
    arg.mean <- mean(yval[[1]])
    arg.sd <- sd(yval[[1]])
    title(paste(allsamples[k], " (Arg1 SD = ", round(arg.sd, 1), ")", sep=""))
    res[[k]] <- c(arg.median, arg.mean, arg.sd)
    names(res)[k] <- allsamples[k]
  }
  dev.off()

  res2 <- do.call(rbind, res)
  colnames(res2) <- c("Median", "Mean", "SD")
  write.table(res2, paste("5- ", title, " - arginase summary.txt", sep=""),
    row.names=T, col.names=NA, sep='\t', na="")

  res2
}

arg <- boxplots(dat.mac3, "Co-culture qPCR box plots")

#log fold change
dat.mac3ex <- dat.mac3[dat.mac3$Sample %in% keepsamples, ]
dat.mac3ex[, "FC"] <- 2 ^ - dat.mac3ex$Median
dat.mac3ex <- dat.mac3ex[order(dat.mac3ex$Sample, dat.mac3ex$Target), ]
write.table(dat.mac3ex, file="3- Co-culture qPCR processed data.txt", row.names=F, sep='\t', na="")

#Summarize for Heat map
dat.hm <- aggregate(dat.mac3ex$Median, dat.mac3ex[c("Target", "Sample")], function(d) -mean(d))
colnames(dat.hm)[3] <- "Mean"
write.table(dat.hm, file="7- Co-culture qPCR processed data for heatmap.txt", row.names=F, sep='\t')
```

```
### Reproducibility test for Arginase
dat.arg <- dat.mac3ex[dat.mac3ex$Target == "Arg1", ]
dat.arg.mean <- aggregate(dat.arg$Median, dat.arg["Sample"], function(d) abs(mean(d)))
dat.arg.sd <- aggregate(dat.arg$Median, dat.arg["Sample"], function(d) sd(d))
dat.arg.mean.sorted <- dat.arg.mean[order(dat.arg.mean$x), ]
dat.arg.sd.sorted <- dat.arg.sd[match(dat.arg.mean.sorted[, 1],dat.arg.sd[, 1]), ]

pdf(file="6- Arginase reproducibility.pdf", width=10, height=7)
par(mar=c(4, 5, 2, 1) + 0.1)
bp <- barplot(height=dat.arg.mean.sorted[, 2], col="gray", axes=F, xaxt="n", space=0.4, cex.lab=1.5)
text(x=bp, y=rep(-1.6, length(bp)), labels=dat.arg.mean.sorted[, 1],
  srt=90, cex=0.7, xpd=T, adj=0, font=2)
axis(side=2, at=seq(0, 12, by=1), cex.axis=1.2, las=1)
mtext(side=2, "Log Abs(Mean) of Arginase", line=3, cex=1.6, font=2)
points(x=bp, y=dat.arg.sd.sorted[, 2], pch=16, col="red")
segy <- sd(dat.arg.mean.sorted[, 2])
 segments(x0=bp[1], y0=segy, x1=bp[length(bp)]+0.3, y1=segy, lty=2, lwd=3, col="darkgreen")
text(x=bp[length(bp)]-21, y=segy+0.4, labels="SD of Means", cex=1.5, adj=0, font=2, col="darkgreen")
segy <- mean(dat.arg.sd.sorted[, 2])
 segments(x0=bp[1], y0=segy, x1=bp[length(bp)]+0.3, y1=segy, lty=2, lwd=3, col="blue")
text(x=bp[length(bp)]-21, y=segy-0.4, labels="Mean of SDs", cex=1.5, adj=0, font=2, col="blue")
text(3, 5.3, "SD of Biol. Replicates", col="red", adj=0, font=2, cex=1.5)
text(bp[50], dat.arg.mean.sorted[50, 2]+1.5, "Mean of Biol. Replicates",
  col="black", pos=3, font=2, cex=1.5)
invisible(dev.off())

#### heatmap

#reshape dataframe to 2x2 matrix
```

```
library(reshape2)
dat <- acast(dat.hm, Target ~ Sample, value.var= "Mean")
ind <- !grepl("Mac", colnames(dat))
dat <- dat[, ind]
arg <- arg[ind, ]

arg <- as.data.frame(arg)
all(rownames(arg) == colnames(dat))
arg[, 4] <- round(arg[, 3] * 100 / abs(arg[, 2]))
colnames(arg)[4] <- "CV"
arg <- arg[order(arg$Mean), ]
dat <- dat[c("Ym-1", "Il6", "iNos", "Socs3", "Il1b", "Arg1"), rownames(arg)]
rownames(dat)[5] <- paste("Il1", greeks("beta"), sep="")
cvcode <- round(arg[, 4]/10)
cvcode[cvcode < 1] <- 1
cvcode[cvcode > 10] <- 10

m <- nrow(dat)
n <- ncol(dat)

#Color cutoffs are set at log values of 1, 35, 75, 350
dat2 <- dat
dat2[dat < 0] <- 1
dat2[dat > 0 & dat < 5.13] <- 2
dat2[dat > 5.13 & dat < 6.23] <- 3
dat2[dat > 6.23 & dat < 8.45] <- 4
dat2[dat > 8.45] <- 5

colramp = colorRampPalette(c("white", "skyblue1", "black"))
colramp2 = colorRampPalette(c("white", "green", "darkgreen"))
```

```
mypal <- colramp(5)

pdf(file="8- Co-culture qPCR heatmap with CV.pdf", width=16, height=7)
layout(matrix(c(1,2,3), ncol=1), widths=c(10), heights=c(2, 6, 2))

par(mar=c(0, 7, 8, 1) + 0.1)
plot(c(0, 100), c(0, 100), type="n", xlab="", ylab="", axes=F, xaxs="i", yaxs="i")
for (i in 1:n) {
  rect((i-1)*100/n, 5, i*100/n, 100, col=colramp2(10)[cvcode[i]], border="gray")
}
text((1:n)*100/n-50/n, 120, colnames(dat), cex=1.5, srt=90, adj=0, xpd=T, font=2)

par(mar = c(1,7,0.5,1) + 0.1)
image(1:n, 1:m, t(dat2), col=mypal, breaks=0:5, xaxt="n", yaxt="n", ann=F)
box()
abline(h=1.5:5.5, col="gray")
abline(v=1.5:(n+0.5), col="gray")
text(-4, 1:6, rownames(dat2), cex=2.5, adj=0, xpd=T, font=4, family="serif")

par(mar=c(0, 0, 0, 0) + 0.1, cex = 0.6)
plot(c(0, 100), c(0, 100), type="n", xlab="", ylab="", axes=F, xaxs="i", yaxs="i")

for (i in 1:11) {
  rect(30+2*i, 85, 32+2*i, 60, col=colramp2(11)[i], border="gray")
}
text(c(33, 53), 40, c("0", "100%"), cex=2.5, font=2)
text(43, 20, "Arg1 Coefficient of Variation", cex=2.5, adj=0.5, xpd=T, font=2)

for (i in 1:5) {
  rect(70+2*i, 85, 72+2*i, 60, col=mypal[i], border="gray")
```

```
}
text(c(73, 81), 43, c("<1", ">350"), cex=2.5, font=2)
text(77, 20, "Fold Change Relative to Mac Control", cex=2.5, adj=0.5, xpd=T, font=2)


invisible(dev.off())
```

Supplemental File 3-Co-Culture qPCR raw data Placeholder – 529 pages
Available on request.

Supplemental File 4-Co-Culture qPCR processed data-Placeholder – 70 pages
Available on request.

	"Median"	"Mean"	"SD"
"A427"	7.872789135	8.56627463095833	2.45119501384872
"A549"	4.886503715	5.21298682833333	1.19939467479752
"Calu-1"	3.49788512375	3.16262748055555	1.29139573043685
"Calu-6"	2.633613715	2.3752021545	2.45576493251576
"DFCI024"	5.582391242125	5.582391242125	2.54956692658189
"EKVX"	6.2387723025	6.03848881235	2.09912605498238
"H1048"	2.20833099625	1.42785375861111	2.74226254019325
"H1299"	3.44834878499999	3.77578676666666	2.20902302091859
"H1355"	5.115999635	6.25120034635	3.49777973173253
"H1373"	5.7075136725	6.37826186583333	2.41035598780324
"H1395"	2.48663845125	2.25807187614583	2.85357501173156
"H1437"	4.536259365	5.8860000725	2.90961948646014
"H1563"	3.144429715	4.18321377027083	3.5846481727016
"H157"	3.23290257375	2.1710168715625	2.96320595704421
"H1573"	4.56610006625	4.56610006625	0.495023485933245
"H1650"	7.0945924425	7.0945924425	0.459173538054847
"H1666"	10.97141306	11.4274323097083	2.11214711055182
"H1693"	10.728688459625	10.6980849610625	1.38003623932787
"H1703"	9.0506685875	8.14606031666666	1.85827007927516
"H1734"	2.60586107375	1.794655868125	3.34069174985659
"H1755"	1.6670369025	0.523471822683333	3.13355950465237
"H1792"	4.8991783475	5.145803737375	2.96551099374988
"H1819"	4.74208874675	3.7353272279881	3.30957624838524
"H1944"	5.707236865	6.09656498391667	2.67031257497363
"H1975"	3.0672239375	2.984522694	2.85796222607278
"H1993"	6.2313928575	5.35797124897222	2.39705323703586
"H2009"	7.48462348675	7.01884221225	1.66659535221469
"H2030"	6.46715898	5.89510325416667	2.52417590619509

"H2073"	4.07711723666667	2.71164720607407	3.17939517540231
"H2085"	5.20939328125	5.02457658279167	1.04859396951254
"H2086"	-1.57802590958333	-1.57802590958333	4.89895111565822
"H2087"	1.11658361925	0.436961393916665	3.63407805584586
"H2122"	9.85450655	8.80192929285	2.63847216137301
"H2172"	0.0660195908749968	-1.15191059227083	4.76508384670347
"H2258"	7.008006039625	7.008006039625	0.339584601666616
"H226"	5.906415795	5.906415795	2.50622637506918
"H2291"	7.58801019	7.58801019	0.169963442152726
"H23"	4.2127383825	4.9388480125	1.87182110284345
"H2347"	2.121255650875	1.89976962848611	3.00465969795055
"H2887"	3.7189354075	2.78726489809524	4.59057157862475
"H292"	8.461242117125	7.2937195516875	2.5005699591281
"H3255"	4.6278255325	4.802884309375	1.05691034478205
"H358"	3.440409745	4.03363890916667	1.47577591336055
"H441"	4.171752305	5.1185128175	2.17544824755269
"H446"	-2.80051485	-2.73736611183333	2.91330438628356
"H460"	4.85952653	5.37537965444444	2.67225877799095
"H522"	7.41279707	7.69965618916666	3.10314355652069
"H596"	9.25878053441667	9.18881667452083	1.45985035699156
"H647"	2.9925792175	2.95964024166666	1.78711844207475
"H650"	3.412896225	4.62745088653704	2.46015598907843
"H661"	0.117230913749999	0.117230913749999	3.87578720310275
"H820"	6.77734408	5.81629879666667	2.02094896925039
"H838"	1.7983147675	2.56276403035	2.63114826602133
"H920"	0.254659263374998	0.254659263374998	2.93502401418418
"HBEC3-KT"	11.7023598138333	12.0566884729444	3.1211208155502
"HCC1171"	4.7664437775	4.55562014601666	1.78950830074812
"HCC15"	0.943216436249996	-0.0370106655555578	2.16595257153459

"HCC1833"	4.5599838825	4.358905325	1.45998480011808
"HCC193"	2.2092158025	2.2092158025	2.43618003791359
"HCC2108"	7.0241371275	6.2623487035	1.76105865457251
"HCC2374"	-1.10806712125	-1.28346162875	2.64229651250909
"HCC2450"	6.39213004175	6.58029657084524	4.14791050054547
"HCC2935"	4.93741436	4.93741436	1.14218766385572
"HCC3051"	8.2840410075	8.43602882225	1.02553768330606
"HCC4019"	7.91135761625	7.91135761625	5.01429803543999
"HCC4054"	7.8428807175	7.8428807175	3.2126490056962
"HCC4087"	2.27729294	2.27729294	2.44576173784954
"HCC44"	7.375750547125	7.375750547125	1.11653127311293
"HCC446"	1.629278954375	1.629278954375	4.05805343085513
"HCC461"	4.680021275875	4.680021275875	1.16329766381917
"HCC515"	8.69287409416667	8.69287409416667	0.52354457490205
"HCC78"	7.4844248775	7.4844248775	5.25509510213518
"HCC827"	7.34775982	6.89772728885	2.08056636683438
"HCC95"	2.7247794775	2.7043444975	0.468787403171414
"HOP-62"	6.753995658375	6.40059761070833	3.90699076526483
"Mac + CAF"	1.19189543	1.19189543	2.15155713108433
"Mac + IL-4"	13.65647878	14.0353793725098	2.09954211790121
"Mac + LPS"	0.805522664541666	0.745936976643518	2.11721769494216

"Target"	"Sample"	"Mean"
"Arg1"	"A427"	8.56627463095833
"Il1b"	"A427"	4.41959185203333
"Il6"	"A427"	3.20278369622024
"iNos"	"A427"	2.40604262283333
"Socs3"	"A427"	4.75992364805714
"Ym-1"	"A427"	-0.0833046318833336
"Arg1"	"A549"	5.21298682833333
"Il1b"	"A549"	3.081318352625
"Il6"	"A549"	0.0641594155555592
"iNos"	"A549"	-1.32533245277778
"Socs3"	"A549"	5.28445266307143
"Ym-1"	"A549"	1.2024971079375
"Arg1"	"Calu-1"	3.16262748055555
"Il1b"	"Calu-1"	4.55952334408333
"Il6"	"Calu-1"	1.36973216423611
"iNos"	"Calu-1"	2.442385955625
"Socs3"	"Calu-1"	5.8976862274256
"Ym-1"	"Calu-1"	-0.389430916416667
"Arg1"	"Calu-6"	2.3752021545
"Il1b"	"Calu-6"	3.31937197125
"Il6"	"Calu-6"	2.44573999408333
"iNos"	"Calu-6"	3.14149553425
"Socs3"	"Calu-6"	6.56001324013889
"Ym-1"	"Calu-6"	1.03084793458333
"Arg1"	"DFCI024"	5.582391242125
"Il1b"	"DFCI024"	5.68890191716666
"Il6"	"DFCI024"	2.403966815875
"iNos"	"DFCI024"	3.87078196920834
"Socs3"	"DFCI024"	5.083922812

"Ym-1"	"DFCI024"	1.4566361455
"Arg1"	"EKVX"	6.03848881235
"Il1b"	"EKVX"	6.01030576304167
"Il6"	"EKVX"	2.24979777951667
"iNos"	"EKVX"	2.80356181485
"Socs3"	"EKVX"	8.095577272625
"Ym-1"	"EKVX"	2.149244423875
"Arg1"	"H1048"	1.42785375861111
"Il1b"	"H1048"	8.457766969375
"Il6"	"H1048"	3.03313338493056
"iNos"	"H1048"	3.39674744715278
"Socs3"	"H1048"	6.352552020625
"Ym-1"	"H1048"	-0.566188565000001
"Arg1"	"H1299"	3.77578676666666
"Il1b"	"H1299"	4.59764440502083
"Il6"	"H1299"	2.79682575833333
"iNos"	"H1299"	3.60824983583333
"Socs3"	"H1299"	7.44254677772916
"Ym-1"	"H1299"	1.83518087189583
"Arg1"	"H1355"	6.25120034635
"Il1b"	"H1355"	7.12741502751667
"Il6"	"H1355"	3.61178516401667
"iNos"	"H1355"	2.83765147185
"Socs3"	"H1355"	4.74018952939584
"Ym-1"	"H1355"	-1.28629696398333
"Arg1"	"H1373"	6.37826186583333
"Il1b"	"H1373"	5.83984151854167
"Il6"	"H1373"	-0.29328634472222
"iNos"	"H1373"	1.55892809833334
"Socs3"	"H1373"	6.371889235

"Ym-1"	"H1373"	0.835909394166666
"Arg1"	"H1395"	2.25807187614583
"Il1b"	"H1395"	4.24018072820833
"Il6"	"H1395"	0.796219231614585
"iNos"	"H1395"	1.65798161609375
"Socs3"	"H1395"	5.33971815366667
"Ym-1"	"H1395"	1.49542705872917
"Arg1"	"H1437"	5.8860000725
"Il1b"	"H1437"	4.156477881
"Il6"	"H1437"	3.22898081975
"iNos"	"H1437"	3.2984364555119
"Socs3"	"H1437"	5.60762944979167
"Ym-1"	"H1437"	1.4312763165
"Arg1"	"H1563"	4.18321377027083
"Il1b"	"H1563"	6.41279810966667
"Il6"	"H1563"	2.82308611907292
"iNos"	"H1563"	1.45421964136458
"Socs3"	"H1563"	4.81779046376389
"Ym-1"	"H1563"	-0.331115221444444
"Arg1"	"H157"	2.1710168715625
"Il1b"	"H157"	6.2053769075
"Il6"	"H157"	2.46636868932292
"iNos"	"H157"	2.98477495671875
"Socs3"	"H157"	5.22300824895833
"Ym-1"	"H157"	1.38291425733333
"Arg1"	"H1573"	4.56610006625
"Il1b"	"H1573"	8.93482578764583
"Il6"	"H1573"	4.70144276
"iNos"	"H1573"	2.45917109125
"Socs3"	"H1573"	5.60065788825

"Ym-1"	"H1573"	-0.245441960479167
"Arg1"	"H1650"	7.0945924425
"Il1b"	"H1650"	2.11019669991667
"Il6"	"H1650"	6.56080061625
"iNos"	"H1650"	2.21762176125
"Socs3"	"H1650"	4.51591427119643
"Ym-1"	"H1650"	1.4070296448125
"Arg1"	"H1666"	11.4274323097083
"Il1b"	"H1666"	6.48898190125
"Il6"	"H1666"	2.58501494247024
"iNos"	"H1666"	3.82860638804167
"Socs3"	"H1666"	9.37984278058333
"Ym-1"	"H1666"	3.29382675825
"Arg1"	"H1693"	10.6980849610625
"Il1b"	"H1693"	6.50707258991667
"Il6"	"H1693"	4.1310684535625
"iNos"	"H1693"	2.93145738064583
"Socs3"	"H1693"	7.01469536222818
"Ym-1"	"H1693"	-0.501999425152778
"Arg1"	"H1703"	8.14606031666666
"Il1b"	"H1703"	4.66432719916667
"Il6"	"H1703"	6.00529122666666
"iNos"	"H1703"	3.746620745
"Socs3"	"H1703"	5.34142972
"Ym-1"	"H1703"	1.66330056333334
"Arg1"	"H1734"	1.794655868125
"Il1b"	"H1734"	5.87968928104166
"Il6"	"H1734"	0.790013478958333
"iNos"	"H1734"	1.482320581875
"Socs3"	"H1734"	6.05522869083334

"Ym-1"	"H1734"	0.490980052499999
"Arg1"	"H1755"	0.523471822683333
"Il1b"	"H1755"	3.13479444466667
"Il6"	"H1755"	2.9393036966
"iNos"	"H1755"	2.3803235851
"Socs3"	"H1755"	3.33892339577777
"Ym-1"	"H1755"	-0.219149142833334
"Arg1"	"H1792"	5.145803737375
"Il1b"	"H1792"	4.08362528475
"Il6"	"H1792"	3.29830521925
"iNos"	"H1792"	3.73805963883333
"Socs3"	"H1792"	5.01941638502778
"Ym-1"	"H1792"	1.20863382169444
"Arg1"	"H1819"	3.7353272279881
"Il1b"	"H1819"	6.93827912808333
"Il6"	"H1819"	1.86203261876191
"iNos"	"H1819"	1.83308460078571
"Socs3"	"H1819"	7.19007811975
"Ym-1"	"H1819"	-2.65515715025
"Arg1"	"H1944"	6.09656498391667
"Il1b"	"H1944"	4.02614449880556
"Il6"	"H1944"	2.38383385030556
"iNos"	"H1944"	1.54640858113889
"Socs3"	"H1944"	2.93621938134524
"Ym-1"	"H1944"	2.15745001116667
"Arg1"	"H1975"	2.984522694
"Il1b"	"H1975"	4.37343361003333
"Il6"	"H1975"	1.4765092259949
"iNos"	"H1975"	2.93375134965476
"Socs3"	"H1975"	6.36586124705714

"Ym-1"	"H1975"	0.811355137616665
"Arg1"	"H1993"	5.35797124897222
"Il1b"	"H1993"	6.14217167238333
"Il6"	"H1993"	1.97188305456349
"iNos"	"H1993"	2.71173567383333
"Socs3"	"H1993"	6.10651548340714
"Ym-1"	"H1993"	2.3347911733
"Arg1"	"H2009"	7.01884221225
"Il1b"	"H2009"	4.10553090697222
"Il6"	"H2009"	7.05843389419445
"iNos"	"H2009"	4.10018555641667
"Socs3"	"H2009"	7.86547095312302
"Ym-1"	"H2009"	0.824700512805556
"Arg1"	"H2030"	5.89510325416667
"Il1b"	"H2030"	4.4772810661875
"Il6"	"H2030"	4.82650861861111
"iNos"	"H2030"	3.330626345
"Socs3"	"H2030"	5.27544798047222
"Ym-1"	"H2030"	0.409459726395835
"Arg1"	"H2073"	2.71164720607407
"Il1b"	"H2073"	2.26094659929167
"Il6"	"H2073"	0.785780052718255
"iNos"	"H2073"	1.63702367536111
"Socs3"	"H2073"	3.72982156494643
"Ym-1"	"H2073"	0.882723156062502
"Arg1"	"H2085"	5.02457658279167
"Il1b"	"H2085"	4.66818682327778
"Il6"	"H2085"	1.05734412668056
"iNos"	"H2085"	1.33317706098611
"Socs3"	"H2085"	7.50020365077778

"Ym-1"	"H2085"	0.986584207583334
"Arg1"	"H2086"	-1.57802590958333
"Il1b"	"H2086"	6.09138602445833
"Il6"	"H2086"	3.00911670875
"iNos"	"H2086"	5.0848519975
"Socs3"	"H2086"	11.310815092375
"Ym-1"	"H2086"	0.867952273625001
"Arg1"	"H2087"	0.436961393916665
"Il1b"	"H2087"	6.03173311521667
"Il6"	"H2087"	4.71917838141667
"iNos"	"H2087"	1.46621825975
"Socs3"	"H2087"	3.89415347657381
"Ym-1"	"H2087"	-1.55423852853333
"Arg1"	"H2122"	8.80192929285
"Il1b"	"H2122"	7.48491327863889
"Il6"	"H2122"	4.91218585735
"iNos"	"H2122"	5.43678878335
"Socs3"	"H2122"	9.311626705875
"Ym-1"	"H2122"	3.22397724725
"Arg1"	"H2172"	-1.15191059227083
"Il1b"	"H2172"	6.36367973495833
"Il6"	"H2172"	2.30664013929167
"iNos"	"H2172"	2.3697835645
"Socs3"	"H2172"	5.1108979035
"Ym-1"	"H2172"	0.628416589749999
"Arg1"	"H2258"	7.008006039625
"Il1b"	"H2258"	5.92614304947222
"Il6"	"H2258"	4.77425008837501
"iNos"	"H2258"	0.507190369625004
"Socs3"	"H2258"	8.31192344641667

"Ym-1"	"H2258"	2.34318012002778
"Arg1"	"H226"	5.906415795
"Il1b"	"H226"	7.64260504260417
"Il6"	"H226"	4.48620223791667
"iNos"	"H226"	1.4709970875
"Socs3"	"H226"	7.03144931200893
"Ym-1"	"H226"	-2.40628171520833
"Arg1"	"H2291"	7.58801019
"Il1b"	"H2291"	3.5119101435
"Il6"	"H2291"	1.76600307041667
"iNos"	"H2291"	2.05688751125
"Socs3"	"H2291"	6.24742149516667
"Ym-1"	"H2291"	3.57082985183333
"Arg1"	"H23"	4.9388480125
"Il1b"	"H23"	3.36545506054167
"Il6"	"H23"	1.84099985416667
"iNos"	"H23"	1.26014184527778
"Socs3"	"H23"	5.02147446807143
"Ym-1"	"H23"	0.7875149860625
"Arg1"	"H2347"	1.89976962848611
"Il1b"	"H2347"	3.33061038502778
"Il6"	"H2347"	3.19447077980556
"iNos"	"H2347"	2.02181038744444
"Socs3"	"H2347"	7.51922542891667
"Ym-1"	"H2347"	0.65911682863889
"Arg1"	"H2887"	2.78726489809524
"Il1b"	"H2887"	5.04830543388889
"Il6"	"H2887"	5.79500638803571
"iNos"	"H2887"	4.42502209291667
"Socs3"	"H2887"	8.85215691444445

"Ym-1"	"H2887"	2.64116787166667
"Arg1"	"H292"	7.2937195516875
"Il1b"	"H292"	7.65170963546667
"Il6"	"H292"	3.45251031960417
"iNos"	"H292"	2.0203873029375
"Socs3"	"H292"	6.308397304125
"Ym-1"	"H292"	0.3189846268
"Arg1"	"H3255"	4.802884309375
"Il1b"	"H3255"	3.282613204375
"Il6"	"H3255"	-0.279165995208333
"iNos"	"H3255"	1.034631170625
"Socs3"	"H3255"	6.0599050125
"Ym-1"	"H3255"	0.0735466616666653
"Arg1"	"H358"	4.03363890916667
"Il1b"	"H358"	7.12681361027777
"Il6"	"H358"	2.09665338027778
"iNos"	"H358"	2.31599327416667
"Socs3"	"H358"	4.5563618625
"Ym-1"	"H358"	-3.04205126333334
"Arg1"	"H441"	5.1185128175
"Il1b"	"H441"	5.79901531033333
"Il6"	"H441"	1.30018693366667
"iNos"	"H441"	2.0553550375
"Socs3"	"H441"	7.5015074585
"Ym-1"	"H441"	2.6007994315
"Arg1"	"H446"	-2.73736611183333
"Il1b"	"H446"	6.1669868275
"Il6"	"H446"	1.76771292025
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"Socs3"	"H446"	5.61339061625

"Ym-1"	"H446"	2.56833934624999
"Arg1"	"H460"	5.37537965444444
"Il1b"	"H460"	7.22100899583333
"Il6"	"H460"	2.64057199708333
"iNos"	"H460"	4.11300127611111
"Socs3"	"H460"	9.5088267375
"Ym-1"	"H460"	2.68700302375
"Arg1"	"H522"	7.69965618916666
"Il1b"	"H522"	4.65792843929167
"Il6"	"H522"	2.05367289555556
"iNos"	"H522"	0.0209363374999979
"Socs3"	"H522"	5.08480627307143
"Ym-1"	"H522"	1.98282797653125
"Arg1"	"H596"	9.18881667452083
"Il1b"	"H596"	9.00173597225
"Il6"	"H596"	3.85944991394941
"iNos"	"H596"	4.20784458285417
"Socs3"	"H596"	8.465205143375
"Ym-1"	"H596"	1.53555672419444
"Arg1"	"H647"	2.95964024166666
"Il1b"	"H647"	4.37868084728572
"Il6"	"H647"	0.989974692916666
"iNos"	"H647"	2.41106182402778
"Socs3"	"H647"	6.11532067145238
"Ym-1"	"H647"	1.79107009680952
"Arg1"	"H650"	4.62745088653704
"Il1b"	"H650"	6.61213282233333
"Il6"	"H650"	2.56280394656085
"iNos"	"H650"	2.17411232940741
"Socs3"	"H650"	6.539032837

"Ym-1"	"H650"	2.26427680666667
"Arg1"	"H661"	0.117230913749999
"Il1b"	"H661"	6.5754763384375
"Il6"	"H661"	2.6656126625
"iNos"	"H661"	3.18075963125
"Socs3"	"H661"	4.64113256325893
"Ym-1"	"H661"	-3.297997614375
"Arg1"	"H820"	5.81629879666667
"Il1b"	"H820"	3.39864836583334
"Il6"	"H820"	-0.94438194
"iNos"	"H820"	0.712896323333332
"Socs3"	"H820"	5.94223724416667
"Ym-1"	"H820"	-0.034782398611112
"Arg1"	"H838"	2.56276403035
"Il1b"	"H838"	4.20584173495
"Il6"	"H838"	2.92527792251667
"iNos"	"H838"	1.11226219168333
"Socs3"	"H838"	3.78963429780714
"Ym-1"	"H838"	1.6914461722
"Arg1"	"H920"	0.254659263374998
"Il1b"	"H920"	3.64683226947222
"Il6"	"H920"	2.554286368375
"iNos"	"H920"	1.42837390754167
"Socs3"	"H920"	4.6762406007619
"Ym-1"	"H920"	-0.959276204694445
"Arg1"	"HBEC3-KT"	12.0566884729444
"Il1b"	"HBEC3-KT"	3.98848662545833
"Il6"	"HBEC3-KT"	3.86588109023809
"iNos"	"HBEC3-KT"	4.45090539211111
"Socs3"	"HBEC3-KT"	7.232660352125

"Ym-1"	"HBEC3-KT"	4.452713255875
"Arg1"	"HCC1171"	4.55562014601666
"Il1b"	"HCC1171"	6.70530737077778
"Il6"	"HCC1171"	2.82489507135
"iNos"	"HCC1171"	4.44071480201667
"Socs3"	"HCC1171"	2.76201216466667
"Ym-1"	"HCC1171"	-3.958278197
"Arg1"	"HCC15"	-0.0370106655555578
"Il1b"	"HCC15"	4.36485303885417
"Il6"	"HCC15"	2.03759436229167
"iNos"	"HCC15"	1.89306880909722
"Socs3"	"HCC15"	6.5434313415625
"Ym-1"	"HCC15"	1.04117529947917
"Arg1"	"HCC1833"	4.358905325
"Il1b"	"HCC1833"	8.6827648715
"Il6"	"HCC1833"	2.38364011416667
"iNos"	"HCC1833"	1.389871855
"Socs3"	"HCC1833"	7.8657033405
"Ym-1"	"HCC1833"	1.63420695366667
"Arg1"	"HCC193"	2.2092158025
"Il1b"	"HCC193"	6.48338363236111
"Il6"	"HCC193"	1.57184021625
"iNos"	"HCC193"	1.30068833875
"Socs3"	"HCC193"	5.56256769625
"Ym-1"	"HCC193"	-3.10933950875
"Arg1"	"HCC2108"	6.2623487035
"Il1b"	"HCC2108"	5.861275943
"Il6"	"HCC2108"	3.584574062
"iNos"	"HCC2108"	2.671520982
"Socs3"	"HCC2108"	6.7488930265

"Ym-1"	"HCC2108"	2.3491641905
"Arg1"	"HCC2374"	-1.28346162875
"Il1b"	"HCC2374"	5.54841074178333
"Il6"	"HCC2374"	1.56129854409722
"iNos"	"HCC2374"	1.90309148465278
"Socs3"	"HCC2374"	6.80089599195
"Ym-1"	"HCC2374"	1.02206863678333
"Arg1"	"HCC2450"	6.58029657084524
"Il1b"	"HCC2450"	5.26309391710417
"Il6"	"HCC2450"	4.0800153937619
"iNos"	"HCC2450"	4.14606852769047
"Socs3"	"HCC2450"	5.0405050254375
"Ym-1"	"HCC2450"	0.644514521895834
"Arg1"	"HCC2935"	4.93741436
"Il1b"	"HCC2935"	3.667333135
"Il6"	"HCC2935"	0.22333708
"iNos"	"HCC2935"	-0.585368171250003
"Socs3"	"HCC2935"	5.33088835583333
"Ym-1"	"HCC2935"	0.344827865000003
"Arg1"	"HCC3051"	8.43602882225
"Il1b"	"HCC3051"	9.09452704808334
"Il6"	"HCC3051"	4.73575161308333
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"Socs3"	"HCC3051"	5.29264229522222
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"Arg1"	"HCC4019"	7.91135761625
"Il1b"	"HCC4019"	5.992317680125
"Il6"	"HCC4019"	3.43296414
"iNos"	"HCC4019"	1.31564263125
"Socs3"	"HCC4019"	5.84547639557143

"Ym-1"	"HCC4019"	1.7671014023125
"Arg1"	"HCC4054"	7.8428807175
"Il1b"	"HCC4054"	7.24249374041667
"Il6"	"HCC4054"	3.17101790625
"iNos"	"HCC4054"	0.181389161666672
"Socs3"	"HCC4054"	4.06102500875
"Ym-1"	"HCC4054"	-4.90201142
"Arg1"	"HCC4087"	2.27729294
"Il1b"	"HCC4087"	9.47988445666667
"Il6"	"HCC4087"	2.77806197375
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"Socs3"	"HCC4087"	4.7857497375
"Ym-1"	"HCC4087"	-4.2685078025
"Arg1"	"HCC44"	7.375750547125
"Il1b"	"HCC44"	4.12606478516667
"Il6"	"HCC44"	4.486623460875
"iNos"	"HCC44"	2.553608053375
"Socs3"	"HCC44"	4.98143072992857
"Ym-1"	"HCC44"	-0.660848309416666
"Arg1"	"HCC446"	1.629278954375
"Il1b"	"HCC446"	8.70805813541666
"Il6"	"HCC446"	2.878456526875
"iNos"	"HCC446"	1.41695432208333
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"Ym-1"	"HCC446"	-5.89482852166667
"Arg1"	"HCC461"	4.680021275875
"Il1b"	"HCC461"	5.391322853
"Il6"	"HCC461"	4.538979609625
"iNos"	"HCC461"	3.686948924625
"Socs3"	"HCC461"	4.4974136395

"Ym-1"	"HCC461"	1.584999668
"Arg1"	"HCC515"	8.69287409416667
"Il1b"	"HCC515"	2.9047774115
"Il6"	"HCC515"	8.00742607041667
"iNos"	"HCC515"	3.41893621791667
"Socs3"	"HCC515"	7.388798477125
"Ym-1"	"HCC515"	4.60453319504167
"Arg1"	"HCC78"	7.4844248775
"Il1b"	"HCC78"	6.82185398852778
"Il6"	"HCC78"	2.81324655916667
"iNos"	"HCC78"	2.28627871291667
"Socs3"	"HCC78"	6.23590012991667
"Ym-1"	"HCC78"	-1.03855207341667
"Arg1"	"HCC827"	6.89772728885
"Il1b"	"HCC827"	4.32562927679167
"Il6"	"HCC827"	4.09164684835
"iNos"	"HCC827"	1.48710663351667
"Socs3"	"HCC827"	6.87071121033333
"Ym-1"	"HCC827"	1.17850682679167
"Arg1"	"HCC95"	2.7043444975
"Il1b"	"HCC95"	2.40118924819445
"Il6"	"HCC95"	0.986567532499999
"iNos"	"HCC95"	1.77605545083334
"Socs3"	"HCC95"	6.54988293069444
"Ym-1"	"HCC95"	1.42869930041666
"Arg1"	"HOP-62"	6.40059761070833
"Il1b"	"HOP-62"	5.93370276193333
"Il6"	"HOP-62"	2.290050227375
"iNos"	"HOP-62"	1.65235762751389
"Socs3"	"HOP-62"	5.6015720991

"Ym-1"	"HOP-62"	-0.516063419066668
"Arg1"	"Mac + CAF"	1.19189543
"Il1b"	"Mac + CAF"	3.49071797504166
"Il6"	"Mac + CAF"	1.10537940874999
"iNos"	"Mac + CAF"	2.3907171925
"Socs3"	"Mac + CAF"	4.54860593759524
"Ym-1"	"Mac + CAF"	0.0841456961874987
"Arg1"	"Mac + IL-4"	14.0353793725098
"Il1b"	"Mac + IL-4"	-0.328854271874999
"Il6"	"Mac + IL-4"	-0.172502503237396
"iNos"	"Mac + IL-4"	-1.2551607755049
"Socs3"	"Mac + IL-4"	0.578390469724603
"Ym-1"	"Mac + IL-4"	4.40884619304687
"Arg1"	"Mac + LPS"	0.745936976643518
"Il1b"	"Mac + LPS"	13.9325569624167
"Il6"	"Mac + LPS"	15.1916982840397
"iNos"	"Mac + LPS"	15.1759596396528
"Socs3"	"Mac + LPS"	3.85272402833571
"Ym-1"	"Mac + LPS"	-0.303370342609375