

```

> rm(list=ls())
> #####
> ##### Import data #####
> #####
>
>
> dataset<-read.csv('C:\\DATA\\example_data.csv', sep=",", header=TRUE, na.strings="NA")
>
>
> #####
> ##### Call FCI code #####
> #####
>
>
> source('C:\\DATA\\FCI_1_2.txt')
>
> r1<-FCI(dataset,.95)
>
> #####
> ##### Display FCI output #####
> #####
>
> dataset
  target target_num    ct  conc rep
1   STD1           1 37.06   10   1
2   STD1           1 38.30   10   2
3   STD1           1 39.36   10   3
4   STD2           2 34.20  100   1
5   STD2           2 34.85  100   2
6   STD2           2 35.35  100   3
7   STD3           3 30.82 1000   1
8   STD3           3 30.54 1000   2
9   STD3           3 31.45 1000   3
10  STD4           4 26.55 10000   1
11  STD4           4 27.93 10000   2
12  STD4           4 27.89 10000   3
13  STD5           5 22.81 100000   1
14  STD5           5 23.68 100000   2
15  STD5           5 24.06 100000   3
16 sample          NA 35.47    NA   1
17 sample          NA 34.81    NA   2
18 sample          NA 34.59    NA   3
>
>
> r1
$`Anova Table`
      df      SS      MS  F.value  P.value
Regression    1 406.05123 406.05123 699.48532 <0.00001
Error        13   6.00357   0.46181
  Lack of fit    3   0.19857   0.06619   0.11402   0.94988
  Pure Error   10   5.80500   0.58050
Total corrected 14 412.05480  29.43249

$`Regression Coefficient estimates table`
      Estimate Lower limit 95% CI Upper limit 95% CI
Intercept  42.027         40.99903         43.05497
Slope      -3.679         -3.98894         -3.36906

$`ct mean of the unknown sample`

y0 = 34.95667

$`Unknown concentration estimate`

X0 =    1.92181
Conc = 83.52346

```

```
$`Fieller's confidence interval`  
Confidence.level  
0.95
```

```
$` `  
X.lower X.upper  
1.60727 2.22094
```

```
$` `  
Conc.lower Conc.upper  
40.48234 166.3171
```