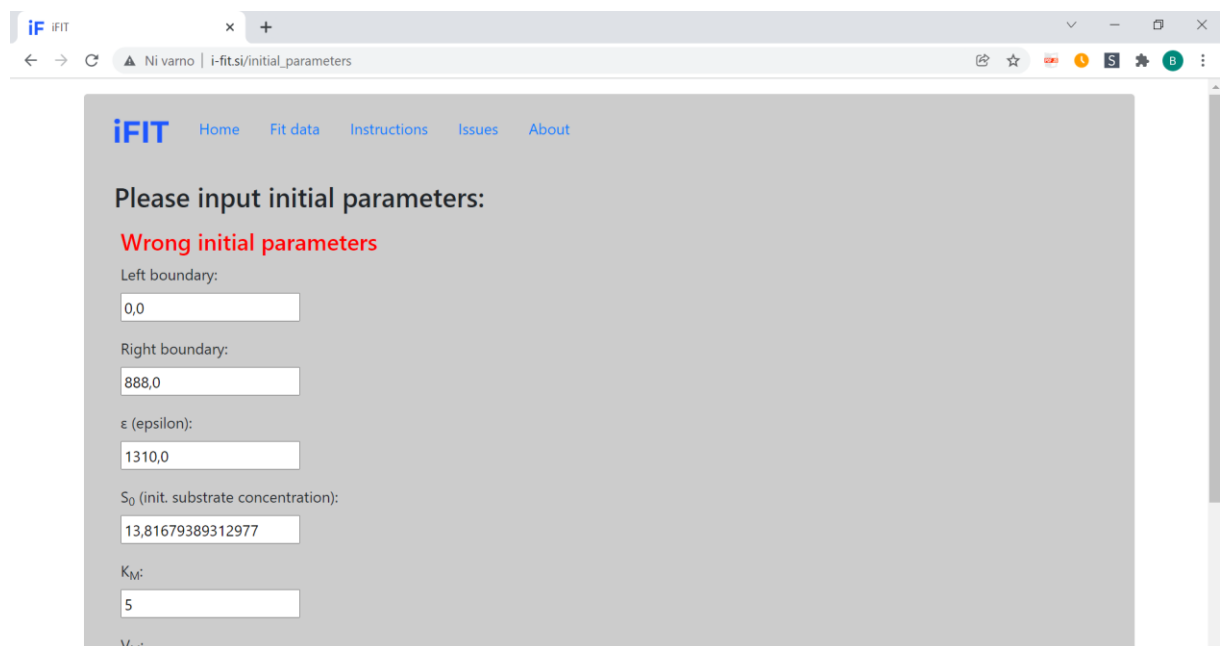


iFIT Troubleshooting

1.1 I input a file, determine the left and right boundaries in the first step, input a guesstimate for Km in the second step, and instead of a result, I get the notice saying “Wrong Initial Parameters.”

Answer: The program could not calculate any Km and Vmax from your progress curve. This is an indication that your measurement has a lot of noise, has ended prematurely or begun too late, or that your reaction does not follow Michaelis-Menten kinetics. Check the .csv file and the graphical display of your progress curve for any outlier points or discontinuities in the measurement. If your plateau keeps rising or falling instead of stabilizing, try removing these points from the progress curve (though this indicates that you have a strong side reaction taking place and the end result of iFIT might not be fully reliable).



The screenshot shows a web browser window with the URL `i-fit.si/initial_parameters`. The page title is "iFIT" and the navigation menu includes "Home", "Fit data", "Instructions", "Issues", and "About". The main content area displays the following:

Please input initial parameters:

Wrong initial parameters

Left boundary:

Right boundary:

ϵ (epsilon):

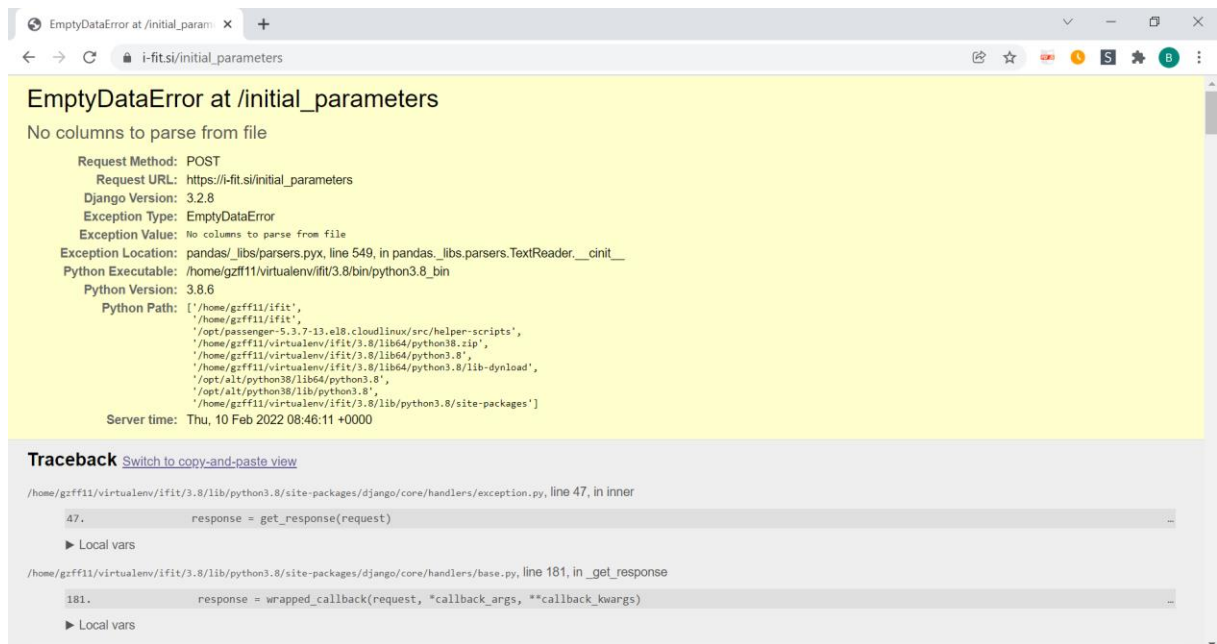
S_0 (init. substrate concentration):

K_M :

V_M :

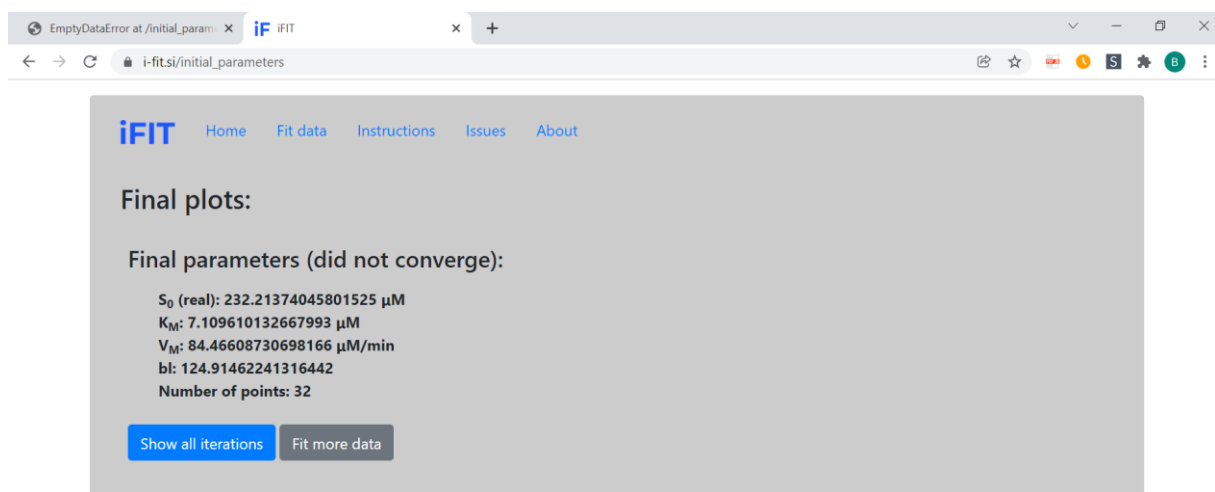
1.2 I input a file, determine the left and right boundaries in the first step, input a guesstimate for Km in the second step, and instead of a result, I receive the message “Empty Data Error.”

Answer: Too much time has elapsed between loading the page for entering parameters and clicking “Submit.” Go back to “Fit data,” reupload your curve and proceed with the subsequent steps more quickly.



1.3 I input a file, determine initial parameters and get a result, but it says that the final parameters did not converge.

Answer: The iterative process could not converge on one set of values for K_m , V_{max} and $[S]_0$, but instead kept oscillating between two or more values. This suggests that there was too much noise in your measurement. You can see all 100 iterations by clicking "Show all iterations." To fix the problem, you can try deleting a few points from the progress curve at the left and right border of t_Q during the last oscillation, since this is where the noise is located. E.g., if t_Q is between 3.52 min and 4.72 min during the 100th oscillation, remove a few points around $t = 3.52$ min and a few points around $t = 4.72$ min from your .csv file. If this does not help, try performing the measurement again. If the difference between the oscillating values for K_m and V_{max} is very small (e.g. 10.11 and 10.13 μM for K_m), you can also take their average as the resultant K_m value.



1.4 When I try to upload a file, I receive the message UniCode Decode Error.

*Answer: You have tried to upload a file in the wrong format (not a .csv document) or in the .csv format but without the correct header (the first line must contain text, the second line must be either "A,min" or "min,A", depending on how your data is ordered, and all subsequent lines must contain time values and absorbance values (or vice versa), separated by a comma; no other text is permitted). See the **Instructions** tab for more detail on how to create and upload files.*

```
UnicodeDecodeError at /upload_file

'utf-8' codec can't decode byte 0xac in position 26: invalid start byte

Request Method: POST
Request URL: http://i-fit.si/upload_file
Django Version: 3.2.8
Exception Type: UnicodeDecodeError
Exception Value: 'utf-8' codec can't decode byte 0xac in position 26: invalid start byte
Exception Location: /home/gzff11/fit/validators.py, line 11, in <listcomp>
Python Executable: /home/gzff11/virtualenv/fit/3.8/bin/python3.8_bin
Python Version: 3.8.6
Python Path: ['/home/gzff11/fit',
              '/home/gzff11/fit',
              '/opt/passenger-5.3.7-13.el8.cloudlinux/src/helper-scripts',
              '/home/gzff11/virtualenv/fit/3.8/lib64/python3.8.zip',
              '/home/gzff11/virtualenv/fit/3.8/lib64/python3.8',
              '/home/gzff11/virtualenv/fit/3.8/lib64/python3.8/lib-dynload',
              '/opt/alt/python38/lib/python3.8',
              '/opt/alt/python38/lib/python3.8',
              '/home/gzff11/virtualenv/fit/3.8/lib/python3.8/site-packages']

Server time: Wed, 09 Feb 2022 13:23:06 +0000

Unicode error hint
The string that could not be encoded/decoded was: s.xmlVVKoF

Traceback Switch to copy-and-paste view

/home/gzff11/virtualenv/fit/3.8/lib/python3.8/site-packages/django/core/handlers/exception.py, line 47, in inner
47.         response = get_response(request)

Local vars

/home/gzff11/virtualenv/fit/3.8/lib/python3.8/site-packages/django/core/handlers/exception.py, line 181, in def response
```

This is how the data in your .csv file should look like:

	A	B	C	D	E	F
1	92_1_DHC.csv					
2	min,A					
3	0,0.14605					
4	0.018,0.1499					
5	0.037,0.1538					
6	0.055,0.15685					
7	0.073,0.1588					
8	0.092,0.1614					
9	0.11,0.16405					
10	0.128,0.16595					
11	0.147,0.16765					
12	0.165,0.1701					
13	0.183,0.173					
14	0.202,0.17575					
15	0.22,0.1784					