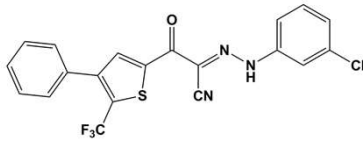


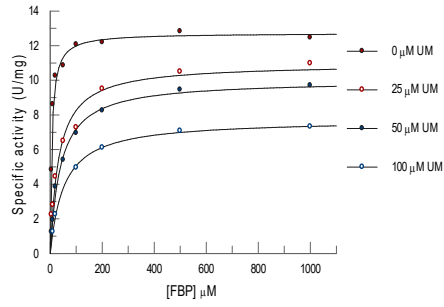
a)



(E)-N'-(3-chlorophenyl)-2-oxo-2-(4-phenyl-5-(trifluoromethyl)thiophen-2-yl)acetohydrazonyl cyanide
 Chemical Formula: C₂₀H₁₁ClF₃N₃O
 Molecular Weight: 433.83
 avg LogP 6.58 (1.35)
 avg LogS -6.48 (-0.2mg/L)

ClC1=CC(N=N=C(C#N)C(C2=CC(C3=CC=CC=C3)-C(C(F)(F)F)S2)=O)=CC=C1

b)

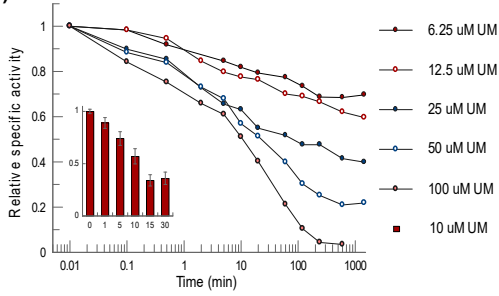


$$v = \frac{V_{max} \cdot [S]}{K_m \left(1 + \frac{[I]}{K_i}\right) + \left(1 + \frac{[I]}{K_i'}\right) [S]}$$

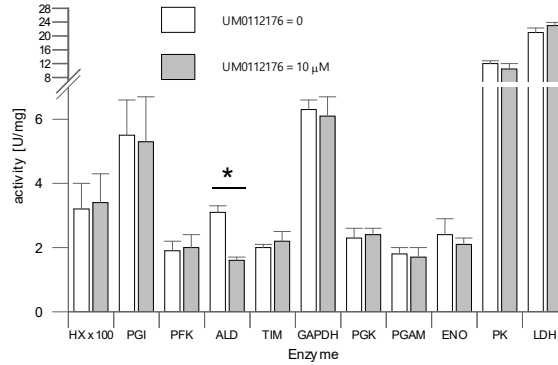
Equation: Mixed Inhibition
 Weighting: Simple
 Data points: 30
 Chi²: 3.4919
 Reduced Chi²: 0.1343

Parameter	Value	Std. Error
Vmax	12.6740	0.1813
Km	6.0021	0.6127
Ki	6.2195	0.8114
Ki' value	175.0644	17.0535

c)



d)



e)

	FBP		P-TRIOSES	
	μM	SD	μM	SD
KLN205				
Full medium	60*	22	153*	46
Full medium+UM0112176	199	38	78	20
glutamine only	50*	11	99*	28
glutamine+UM0112176	34	10	223	29
glucose only	64*	23	100*	11
glucose+UM0112176	137	25	89	10
ASTROCYTES				
Full medium	617**	91	933*	224
Full medium+UM0112176	1155	109	279	62
glutamine only	292*	49	1038*	99
glutamine+UM0112176	250	46	3158	566
glucose only	476*	61	565*	113
glucose+UM0112176	847	140	347	97

n=3 (three independent cells culturing experiments)

* - p<0.05

** - p<0.005

1 - full medium (glucose – 5 mM, glutamine- 2 mM)

2 - full medium+UM0112176

3 – glutamine (2 mM) only

4 – glutamine only+UM0112176

5 – glucose (5 mM) only

6 – glucose only + UM0112176