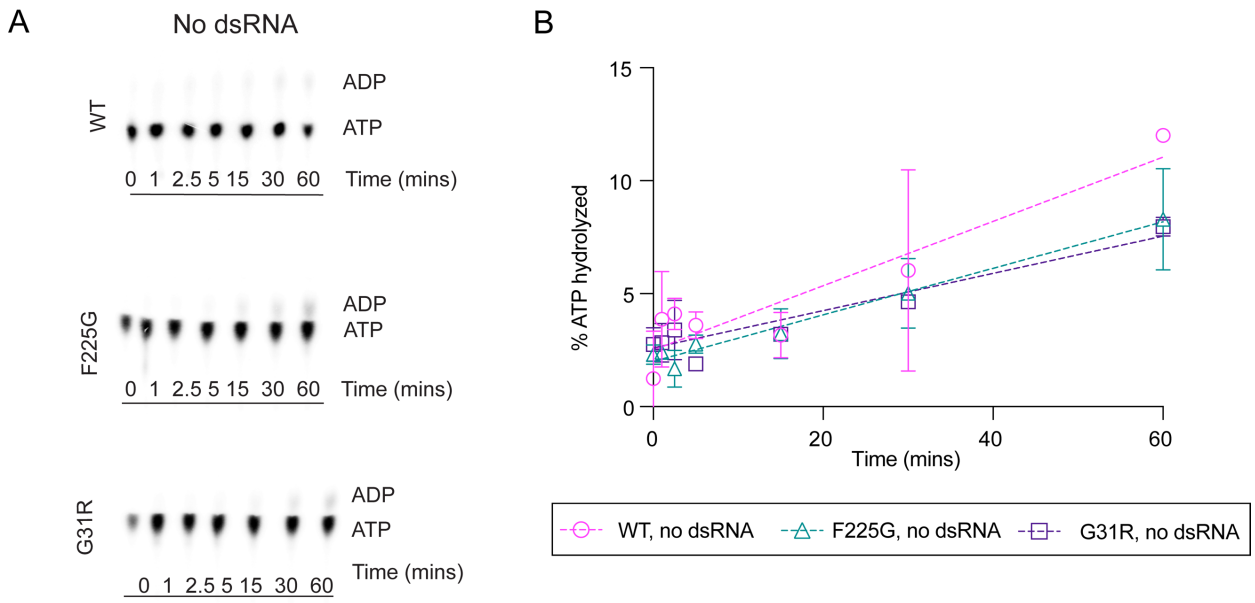
A
No dsRNA
WT
ADP
ATP
0 1 2.5 5 15 30 60
Time (mins)
F225G
ADP
ATP
0 1 2.5 5 15 30 60
Time (mins)
G31R
ADP
ATP
0 1 2.5 5 15 30 60
Time (mins)
B
% ATP hydrolyzed
15
10
5
0
0
20
40
60
Time (mins)
WT, no dsRNA
F225G, no dsRNA
G31R, no dsRNA

S6: ATP hydrolysis without dsRNA: A) PhosphorImages of representative TLC plates show ATP hydrolysis during incubation at 25°C with Dcr-2^{WT}, Dcr-2^{F225G}, or Dcr-2^{G31R}, in the absence of dsRNA. Dcr-2 (200nM) and ATP (100μM), with addition of 100nM of [α-^{32}P] ATP (3000 Ci/mmol) to monitor hydrolysis. B) Quantification of data from panel A. *n = 3*, errors bars, SD. Data fit with pseudo first order equation, $y = y_0 + A\ (1 + e^{-kt})$, where A = amplitude of rate curve, y_0 = baseline (~0), k = k_{obs} (first order rate constant), t = time. ATP hydrolysis by Dcr-2 is inefficient without dsRNA (Cenik et al. 2011; Sinha et al. 2015).