

	1	2	3	4	5	6	7	8	9	10	11
S	0	Δ	Δ^{KM}	MBP	0	Δ	0	Δ	0	Δ	
ATP	+	+	+	+	+	-	-	+	+	-	-
AMP-PNP	-	-	-	-	-	+	+	-	-	-	-
MgCl ₂	+	+	+	+	+	+	+	-	-	+	+

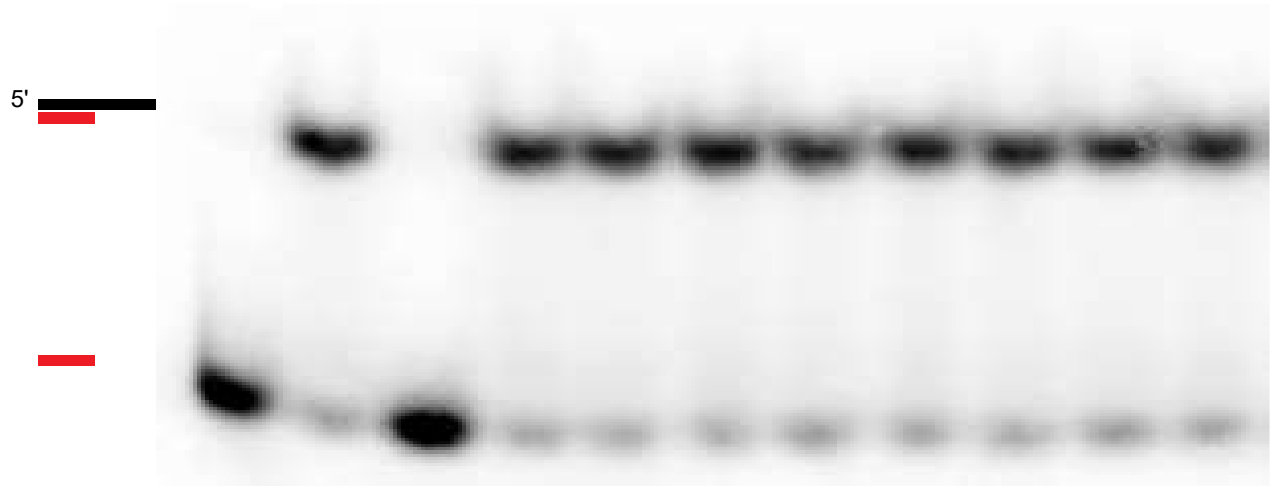


Figure S5- Fancm unwinds duplex DNA in an ATP dependent manner. Protein (212 nM) was incubated with a 5' radiolabeled 15 bp partial duplex with a 25 nucleotide 3' overhang (15/40). Lane 1 is a boiled loading control indicating ssDNA (S); Lanes 2, 6, 8, and 10 are no protein controls (0); Lanes 3, 7, 9, and 11, are Fancm Δ (Δ); Lane 4 is Fancm Δ KM (Δ KM); Lane 5, maltose binding protein (MBP) was used a negative control. Reactions were performed at 37° for 15 minutes in the presence (+) or absence (-) of ATP, AMP-PNP, and MgCl₂. Colored strand represents radiolabeled strand. Substrate oligonucleotides can be found in Supporting Table S1.