



title

Roberta Graff*, Javier de Ruiz Garcia†, and Franklin Sonnery†

*University of Cambridge, Cambridge, United Kingdom, and †Universidad de Murcia, Bioquimica y Biologia Molecular, Murcia, Spain

Submitted to Proceedings of the National Academy of Sciences of the United States of America

abstract Abbreviations: SAM, self-assembled monolayer; OTS, octadecyltrichlorosilane

monolayer | structure | x-ray reflectivity | molecular electronics

Significance

RJSM and ACAC developed the concept of the study. RJSM conducted the analysis, data interpretation and drafted the manuscript. AGB contributed to the development of the statistical methods, data interpretation and drafting of the manuscript.

Reserved for Publication Footnotes







figsamp-eps-converted-to.pdf

Fig. 1. LKB1 phosphorylates Thr-172 of AMPK α *in vitro* and activates its kinase activity.

Table 1. Repeat length of longer allele by age of onset class. This is what happens when the text continues.

Age of onset,	Repeat length							
years	\overline{n}	Mean	SD	Range	Median			
Juvenile, 2-20	40	60.15	9.32	43-86	60			
Typical, 21-50	377	45.72	2.97	40-58	45			
Late, $>$ 50	26	41.85	1.56	40-45	42*			

^{*}The no. of wells for all samples was 384. Genotypes were determined by mass spectrometric assay. The m_t value indicates the average number of wells positive for the over represented allele.

Table 2. Summary of the experimental results

Param	eters		Averaged Results				Comparisons					
\overline{n}	S_{MAX}^*	t_1	r_1	m_1	t_2	r_2	m_2	t_{lb}	t_{1}/t_{2}	r_1/r_2	m_1/m_2	t_1/t_{lb}
10*	1	4	.0007	4	4	.0020	4	4	1.000	.333	1.000	1.000
10^{\dagger}	5	50	.0008	8	50	.0020	12	49	.999	.417	.698	1.020
100 [‡]	20	2840975	.0423	95	2871117	.1083	521		.990	.390	.182	

 $^{{}^*\}mathsf{Stanford}\ \mathsf{Synchrotron}\ \mathsf{Radiation}\ \mathsf{Laboratory}\ (\mathsf{Stanford}\ \mathsf{University},\ \mathsf{Stanford},\ \mathsf{CA})$



 $^{^{\}dagger}R_{\mathrm{FREE}}=R$ factor for the $\sim5\%$ of the randomly chosen unique reflections not used in the refinement.

[‡]Calculated for all observed data





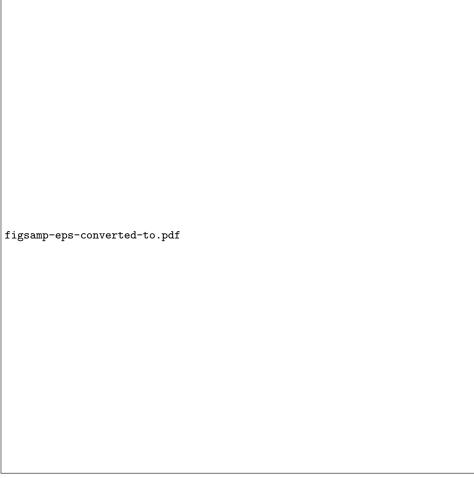


Fig. 2. LKB1 phosphorylates Thr-172 of AMPKlpha $in\ vitro$ and activates its kinase activity.