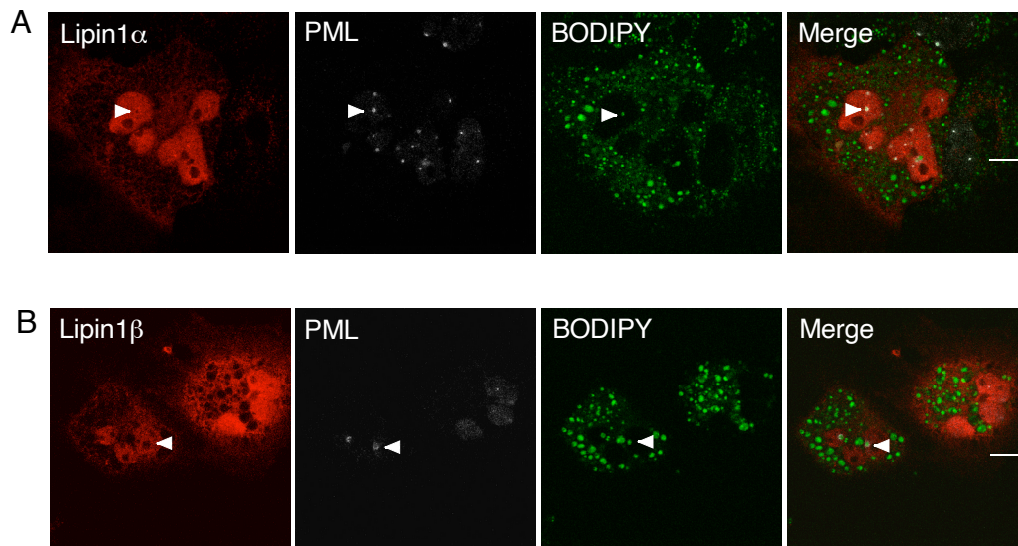


Supplemental Materials

Molecular Biology of the Cell

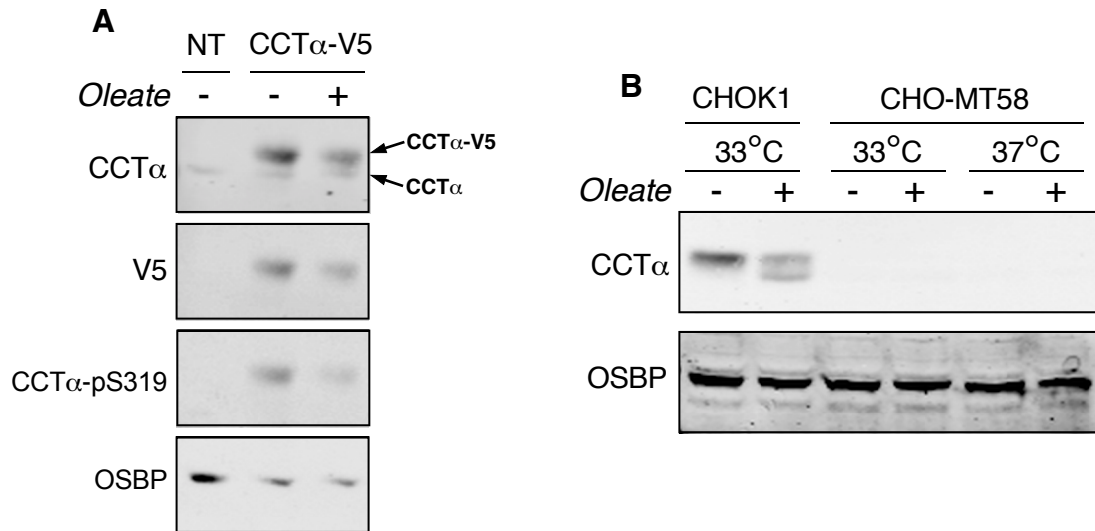
Foster *et al.*

Supplemental Figure 1



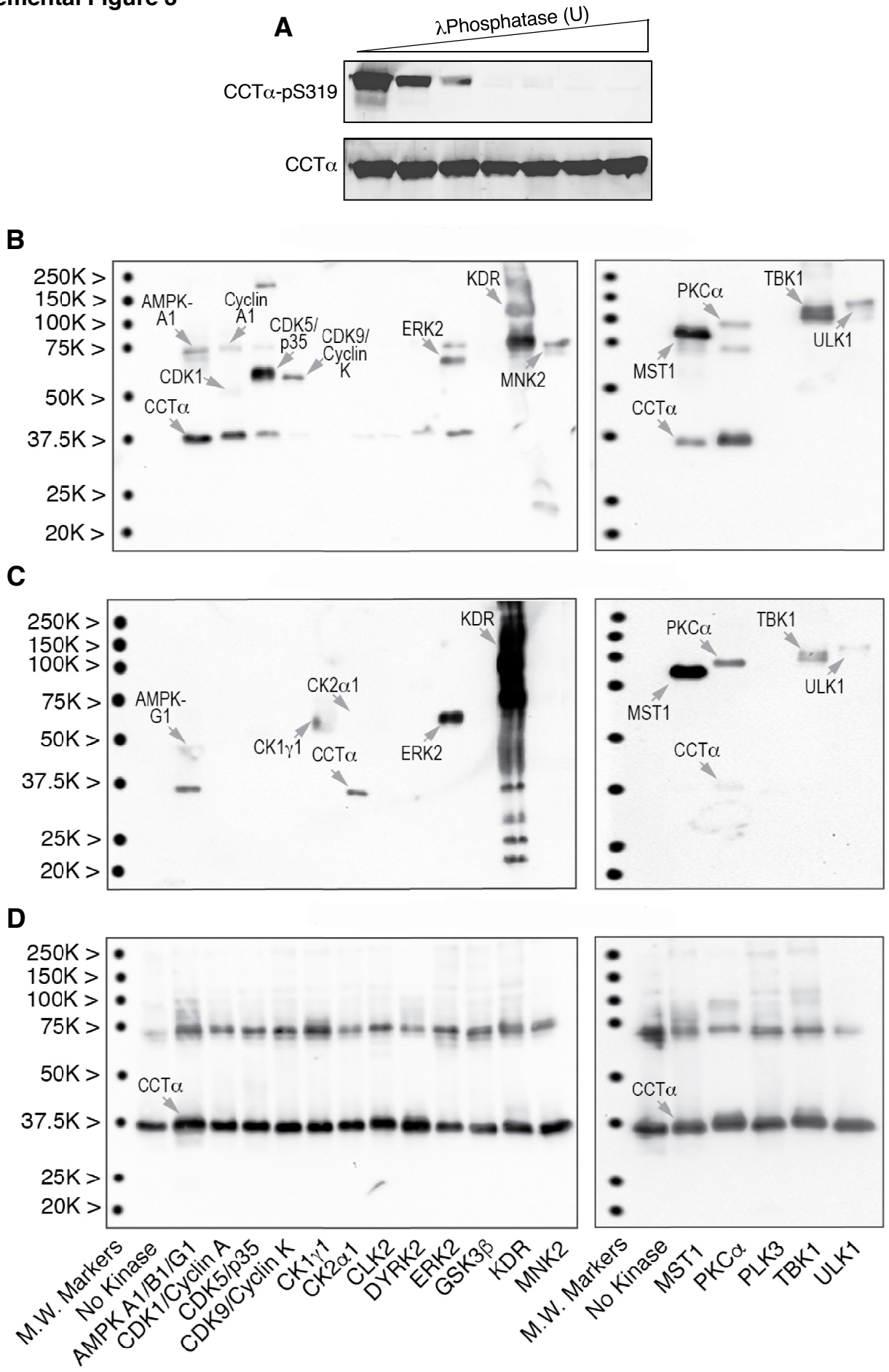
Supplemental Figure 1. **Lipin1 α and 1 β do not localize to palmitate-induced nLDs or LAPS.** Huh7 cells transiently expressing V5-tagged Lipin1 α (panel A) or Lipin1 β (panel B) were immunostained V5 and PML. LDs were visualized with BODIPY493/503 (bar, 10 μ m).

Supplementary Figure 2



Supplemental Figure 2. **CCT α expression in U2OS and MT58 cells.** A, Immunoblot of non-transfected (NT) and U2OS cells expressing CCT-V5 treated with or without oleate for 24 h. B, expression of endogenous CCT α in MT58 cells cultured with and without oleate at the permissive (33°C) and non-permissive (37°C) temperature.

Supplemental Figure 3



Supplemental Figure 3. **Immunoblot of CCT α phosphorylation by candidate kinases.** A, recombinant rat CCT α (20 μ g) was incubated with 0-400U of λ phosphatase for 1 hour at 30°C followed by immunoblotting for pS319 and CCT α protein. B, C and D complete immunoblots from Figure 10A that were probed with antibodies against pS319 (panel B), pY359/pS362 (panel C) and CCT α (panel D) showing the presence of other phosphorylated kinases and activator proteins used in the *in vitro* screen.

Supplemental Table 1

Primer ID	Sequence
1A CCT 2A fwd	CCCAAGCAGGCTCCCGCCGCCGCCCTACTCATGAGCGC
1A CCT 2A rev	GCGCTCATGAGTAGGGGCGGCGGGGAGCCTGCTTGGG
1D CCT 2D fwd	GCTGCAGGCCATCGATCCCAAGCAGGCATCCTACGACGACCCC
1D CCT 2D rev	GGGGTCGTCGTCGGGATCCTGCTTGGGATCGATGGCCTGCAGC
CCT 2A fwd	CCCAAGCAGAGTCCCGCCGCCGCCCTACTCATGAGCGC
CCT 2A rev	GCGCTCATGAGTAGGGGCGGCGGGGACTCTGCTTGGG
CCT 2D fwd	CCCAAGCAGAGTCCCGACGACGACCCTACTCATGAGCGC
CCT 2D rev	GCGCTCATGAGTAGGGTCGTCGTCGGGACTCTGCTTGGG
CCT 3A fwd	CTCATGAGCGCGCCCCCGCCCCGCCTTTCGGTGGCCC
CCT 3A rev	GGGCCACCGAAAGGCGGGGGCGGGGGCGCGCTCATGAG
CCT 3D fwd	CTCATGAGCGCGACCCCGACCCGACTTTCGGTGGCCC
CCT 3D rev	GGGCCACCGAAAGTCGGGGTCGGGGTCGCGCTCATGAG
CCT 4A fwd	GGCAAGACTTCCCCAGCTGCCGCCCCAGCAAGTCTCTCTAGG
CCT 4A rev	CCTAGAGAGACTTGCTGGGGCGGCAGCTGGGGAAGTCTTGCC
CCT 4D fwd	GGCAAGACTTCCCCAGATGACGACCCAGCAAGTCTCTCTAGG
CCT 4D rev	CCTAGAGAGACTTGCTGGGTCGTCATCTGGGGAAGTCTTGCC

Supplemental Table 2

Candidate Kinase	SignalChem Cat No.
AMPK (A1/B1/G1)	P47-10H
CDK1/cyclinA	C22-18BG
CDK5/p35	C33-10BG
CDK9/CyclinK	C40-10G
CK1-gamma 1	C68-11G
CK2 alpha 1	C70-10G
CLK2	C58-11G
DYRK2	D10-10G
ERK2	M28-10G
GSK3-beta	G09-10G
KDR	K01-11G
MNK2	M55-10G
MST1	S25-10G
PKC-alpha	P61-18G
PLK3	P43-13G
TBK1	T02-10G
ULK1	U01-11G