

Doctoral College Metabolic & Cardiovascular Disease



MECHANISMS OF NUTRIENT SIGNALING: CROSSTALK BETWEEN LIPIDS AND OXYGEN

GUEST LECTURE by

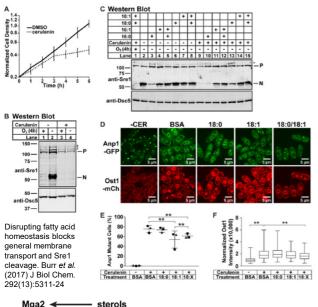


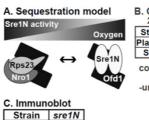
Prof. Peter J. Espenshade, PhD

Department of Cell Biology, Center for Metabolism and Obesity Research, Johns Hopkins School of Medicine, Baltimore, USA

Wednesday, 27.03.2019 17:00

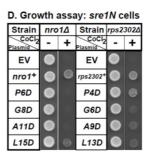
17:00, MC1.G.01.005 (Seminar room 01 - Applied Biomedicine; MED Campus, tract G, 1st floor), MUG

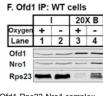




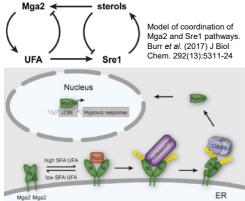
ΕV	1N	sre	
	pozouz	EV	rps230
1	2	3	4
•	0	0	•
1	8	13	

E. Ofd1 IP: WT cells											
	Input				20X Bound						
DMOG	-	+	-	+	-	+	-	+			
DSP	•	-	+	+	-	-	+	+			
Lane	1	2	3	4	5	6	7	8			
Ofd1	-				_	_	_	_			
Nro1			_	-		-	-				
Rps23	_	_	_	_		-	_	_			

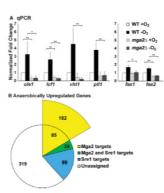




Ofd1-Rps23-Nro1 complex sequesters Ofd1 under hypoxia to activate Sre1N. Clasen *et al.* (2017) eLife. 6:e28563



Mga2 cleavage activation pathway.
Burr & Espenshade (2018) Sem Cell Dev Biol. 81:110-20



Lane

Sre1

actin

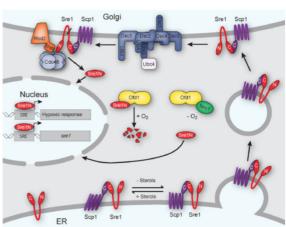
37 kD

Rps23

15 kD

actin

Mga2 controls low oxygen gene expression Burr et al. (2016) J Biol Chem. 291(23): 12171-83



Sre1 cleavage activation pathway. Burr & Espenshade (2018) Sem Cell Dev Biol. 81:110-20