

Table SI. Primer Sequences.

Name	Primer sequences (5'-3')
Mouse β -actin-F	TGCTGTCCCTGTATGCCTCTG
Mouse β -actin-R	TGATGTCACGCACGATTTC
Mouse ERS2-F	TGCCCTGGTCTGGGTGATT
Mouse ERS2-R	CCCCGAGATTGAGGACTTGT

Table SII. Antibody List

Antibody	Source	Identifier	Dilution ratio	Catalog #
Phospho-AKT (Ser473) Monoclonal antibody	Proteintech	CloneNo. 2E17; RRID: AB_2918892	IF : 1:200 IHC: 1:200	80455-1-RR
FOXO3A Polyclonal Antibody	Thermo Fisher	RRID: AB_2294274	ChIP: 1:50	PA1-805
ESR2 Polyclonal antibody	Proteintech	RRID: AB_2102386	IF : 1:200 IHC: 1:200	14007-1-AP
MSR1 Rabbit mAb	Abclonal	CloneNo. ARC0750	IF : 1:200 IHC: 1:200	A2401
β -Actin Rabbit mAb (AC026)	Abclonal	CloneNo. ARC5115- 01	WB: 1:1000	AC026
CoraLite488-conjugated Goat Anti-Rabbit IgG(H+L)	Proteintech	RRID: AB_2797132	IF : 1:400	SA00013-2
CoraLite594 – conjugated Goat Anti-Rabbit IgG(H+L)	Proteintech	RRID: AB_2810984	IF : 1:400	SA00013-4
ER beta/NR3A2 Antibody [PE]	Novus Biologicals	-	FC: 1:100	NBP2-81132PE
BV421 Rat Anti-Mouse F4/80	BD Pharmingen	RRID: AB_2734779	FC: 1:200	565411