

Cluster			
Direction			
	**	**	HALLMARK-UV-RESPONSE-UP
	***	***	HALLMARK-UNFOLDED-PROTEIN-RESPONSE
	****	****	HALLMARK-TNFA-SIGNALING-VIA-NFKB
	*	*	HALLMARK-TGF-BETA-SIGNALING
	*	*	HALLMARK-MYC-TARGETS-V1
	***	***	HALLMARK-MTORC1-SIGNALING
	*	*	HALLMARK-INFLAMMATORY-RESPONSE
	**	**	HALLMARK-HYPOXIA
	**	**	HALLMARK-CHOLESTEROL-HOMEOSTASIS
	***	***	HALLMARK-ANDROGEN-RESPONSE
	*	*	HALLMARK-APOPTOSIS
			HALLMARK-XENOBIOTIC-METABOLISM
			HALLMARK-WNT-BETA-CATENIN-SIGNALING
			HALLMARK-UV-RESPONSE-DN
			HALLMARK-SPERMATOGENESIS
			HALLMARK-REACTIVE-OXYGEN-SPECIES-PATHWAY
			HALLMARK-PROTEIN-SECRETION
			HALLMARK-PI3K-AKT-MTOR-SIGNALING
			HALLMARK-PEROXISOME
			HALLMARK-PANCREAS-BETA-CELLS
			HALLMARK-P53-PATHWAY
			HALLMARK-OXIDATIVE-PHOSPHORYLATION
			HALLMARK-NOTCH-SIGNALING
			HALLMARK-MYOGENESIS
			HALLMARK-MYC-TARGETS-V2
			HALLMARK-MITOTIC-SPINDLE
			HALLMARK-KRAS-SIGNALING-UP
			HALLMARK-KRAS-SIGNALING-DN
			HALLMARK-INTERFERON-GAMMA-RESPONSE
			HALLMARK-INTERFERON-ALPHA-RESPONSE
			HALLMARK-IL6-JAK-STAT3-SIGNALING
			HALLMARK-IL2-STAT5-SIGNALING
			HALLMARK-HEME-METABOLISM
			HALLMARK-HEDGEHOG-SIGNALING
			HALLMARK-GLYCOLYSIS
			HALLMARK-G2M-CHECKPOINT
			HALLMARK-FATTY-ACID-METABOLISM
			HALLMARK-ESTROGEN-RESPONSE-LATE
			HALLMARK-ESTROGEN-RESPONSE-EARLY
			HALLMARK-EPITHELIAL-MESENCHYMAL-TRANSITION
			HALLMARK-E2F-TARGETS
			HALLMARK-DNA-REPAIR
			HALLMARK-COMPLEMENT
			HALLMARK-COAGULATION
			HALLMARK-BILE-ACID-METABOLISM
			HALLMARK-APICAL-SURFACE
			HALLMARK-APICAL-JUNCTION
			HALLMARK-ANGIOGENESIS
			HALLMARK-ADIPOGENESIS
			HALLMARK-ALLOGRAFT-REJECTION

RRA

no significant
significant

P Value

* < 0.05
** < 0.01
*** < 0.001
**** < 0.0001

Cluster

High PTGS2 Fibroblasts
Low PTGS2 Fibroblasts

Direction

down
up