

Table 1

DEGs up-regulated in the context of semi-synthetic HD membranes		
Biological Process	Gene-Symbols	p-value
Immunity and defense	ABCC5, ALOX12, CAMP, CCL2, CCR1, CD163, CLEC1B, CSF1R, CSF3R, CTSS, EPHX1, F2, FCGR1A, FCGR2B, GAB3, GBP1, GZMA, HLA-DQB1, HLA-DRB1, HLA-E, IRF7, ITGB1, KLRB1, LGALS9, LILRB3, LRRK2, LTB, MS4A2, PF4, PHCA, PPARA, PTPRC, RGS1, S100A8, SLA, TAP2, TGIF, TNFRSF8, XRCC6	<0.001
Signal transduction	ABI3, ADRBK2, ARHGAP30, CCL2, CCR1, CENTA1, CHES1, CLEC1B, CSF1R, CSF3R, DOCK10, DTX4, ERBB3, FAS, FCGR1A, FCGR2B, FLJ23834, FPR1, GAB3, GABBR1, IFT140, ITGB1, LATS2, LILRA2, LILRB3, LIMS1, LRRK2, LTB, LTBP1, MAPK8, MS4A2, MYLK, NCF1, NRTN, P2RY13, PF4, PLCB2, PPARA, PTPN7, PTPRC, RAB9A, RASSF4, RGS1, RGS18, RGS6, SLA, SOCS3, TGIF, TNFRSF8, WSB2, WWTR1	<0.001
Macrophage-mediated immunity	CD163, FCGR1A, FCGR2B, GAB3, GBP1, LTB, PF4, S100A8, TGIF	<0.001
Natural killer cell mediated immunity	CLEC1B, FCGR1A, FCGR2B, GZMA, KLRB1, LILRB3, LTB	<0.001
T-cell mediated immunity	CTSS, GAB3, GZMA, HLA-DQB1, HLA-DRB1, HLA-E, LTB, SLA, TNFRSF8	0.001
Cell motility	ABI3, CCR1, CSF1R, DOCK10, FPR1, ITGB1, LIMS1, LTBP1, PF4, S100A8, TUBB1	0.005
Cell surface receptor mediated signal transduction	ADRBK2, CCL2, CCR1, CENTA1, CHES1, CSF1R, CSF3R, DTX4, ERBB3, FAS, FPR1, GAB3, GABBR1, IFT140, LIMS1, LTB, MS4A2, P2RY13, PF4, PLCB2, RGS1, RGS18, RGS6, SLA, TGIF, TNFRSF8	0.007
Apoptosis	FAS, GZMA, LGALS9, MYBL2, NAIP, NALP1, PDCD5, PF4, RASSF4, SOCS3, STK17B, TGIF	0.009
Intracellular protein traffic	CAMP, CD163, COMT, DOCK10, ERO1L, IFT140, MX1, RAB9A, RASSF4, RIN1, RTN4, SSR2, STON2, STX5, TRAK2, TUBB1, YIPF5	0.017
Other metabolism	AKR1C3, CA2, COMT, CRSP2, DIO2, GNPAT1, MAP3K14, NEK2, PHCA, SLC27A3, SNAPC3	0.050
Pathway		
Inflammation mediated by chemokine and cytokine signaling pathway	ADRBK2, CCL2, SOCS3, PF4, ALOX12, PLCB2, RGS1, MYLK, CCR1, RGS18, FPR1, ITGB1	<0.001
Molecular Function		
Defense / immunity protein	CAMP, CLEC1B, FCGR1A, FCGR2B, HLA-DQB1, HLA-DRB1, HLA-E, KLRB1, LILRA2,	<0.001

	LILRB3, MS4A2, PLTP	
Receptor	CCR1, CD163, CLEC1B, CRSP2, CSF1R, CSF3R, ERBB3, FAS, FCGR1A, FCGR2B, FPR1, GABBR1, ITGB1, KLRB1, LILRA2, LILRB3, MS4A2, MS4A7, P2RY13, PIM1, PPARA, PTPRC, SSR2, TNFRSF8	0.003
Select regulatory molecule	ABI3, ARHGAP30, CAMP, CDK5R1, CENTA1, DOCK10, GBP1, MX1, NAIP, PDCD5, RAB9A, RASSF4, RGS1, RGS18, RGS6, RIN1, SEPT6, SIPA1, WWTR1	0.014

DEGs up-regulated in the context of full-synthetic membranes		
Biological Process	Gene-Symbols	p-value
Cell cycle	CCNB2, CYR61, EGFR, FOXF2, HTLF, JUN, KIF11, NBR2, TTK, TUBD1, UHRF1, WEE1	0.001
Cell cycle control	CCNB2, CYR61, EGFR, FOXF2, HTLF, JUN, WEE1	0.027