IPMN Specimens clusterPan (x-axis) clusterLn (y-axis) IGHG1 IGHG2 MS4A1 IGHG3 LTB FDCSP IGHG4 CD52 GD79A **IGKC** CD37 UBD PTPRCAP PAX5 CR2 TNFRSF13C 5 IRAG2 **IGHM** H3C15 HLA-DQA1 RASSF5 ATP2A3 **DE Genes** PSD4 CD82 TP53INP1 xdn_ydn H4C2 SYTL1 xdn_yno log2fc_clusterLn xdn_yup xno_ydn ZEB2、 xno_yno SDC3-MA DEPP1 EHD3 xno_yup BHLHA15 ERP27 GAS7 xup_ydn CEL **ERO1B** xup_yno THY1 CELA3B **FANCB** xup_yup **MGLL** CELA3A CLPS CPA2 PRSS2\CTRB1 NRGN IGFBP5 SPC INS PNLIP GPM6B DKK3 CRIM1 NEBL **CTRC** CPA1 CRYAB HTRA1 TRIM2 FAT1 CPB1 TACC2 CAMK2N1 SNAP25 DDAH1 EDIL3 SORT1 -5 PFN2 10 -5 log2fc_clusterPanc